



# 17" LCD TV

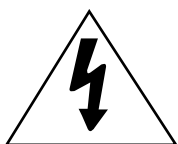


## **TW1730** User's Guide

# Warning! Important Safety Instructions



**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

*Note to CATV system installer:* This reminder is provided to call CATV system installer's attention to Article 820-40 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part I), that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

*Caution: FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.*

*Caution: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.*

*Attention: pour éviter les chocs électriques, introduire la lame le plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.*

*Important:* One Federal Court has held that unauthorized recording of copyrighted TV programs is an infringement of U.S. copyright laws.

Certain Canadian programs may also be copyrighted and any unauthorized recording in whole or in part may be in violation of these rights.

**To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.**

# Important Safety Information



Always be careful when using your LCD TV. To reduce the risk of fire, electrical shock, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

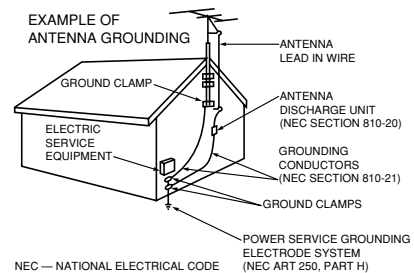
- Read all safety and operating instructions before operating your LCD TV.
- Keep the safety and operating instructions for future reference.
- Heed all warnings on the LCD TV and in the operating instructions.
- Follow all operating and use instructions.
- Unplug the LCD TV from the wall outlet before cleaning. Use a damp cloth; do not use liquid or aerosol cleaners.
- Never add any attachments and/or equipment without approval of the manufacturer. Such additions can increase the risk of fire, electric shock, or other personal injury.
- Do not use the LCD TV where contact with or immersion in water is a possibility, such as near bath tubs, sinks, washing machines, swimming pools, etc.
- Do not place the LCD TV on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling LCD TV can cause serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the LCD TV. Follow the manufacturer's instructions when mounting the unit, and use a mounting accessory recommended by the manufacturer. Move the LCD TV and cart with care. Quick stops, excessive force, and uneven surfaces can make the unit and cart unsteady and likely to overturn.
- Provide ventilation for the LCD TV. The unit is designed with slots in the cabinet for ventilation to protect it from overheating. Do not block these openings with any object, and do not place the LCD TV on a bed, sofa, rug, or other similar surface. Do not place it near a radiator or heat register. If you place the LCD TV on a rack or bookcase, ensure that there is adequate ventilation and that you've followed the manufacturer's instructions for mounting.
- Operate your LCD TV only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.
- Use only a grounded or polarized outlet. For your safety, this LCD TV is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your outlet.
- Protect the power cord. Power supply cords should be routed so that they won't be walked on or pinched by objects placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Unplug the LCD TV from the wall outlet and disconnect the antenna or cable system during a lightning storm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-line surges.



# Important Safety Information

- Avoid overhead power lines. An outside antenna system should not be placed in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outside antenna system, be extremely careful to keep from touching the power lines or circuits. Contact with such lines can be fatal.
- Do not overload the wall outlet or extension cords. Overloading can result in fire or electric shock.
- Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts. Never spill liquid of any kind on the LCD TV.

- Ground outdoor antennas. If an outside antenna or cable system is connected to the LCD TV, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information about proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



- Do not attempt to service the LCD TV yourself. Refer all servicing to qualified service personnel. Unplug the unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - when the power-supply cord or plug is damaged
  - if liquid has been spilled on the unit or if objects have fallen into the unit
  - if the LCD TV has been exposed to rain or water
  - if the LCD TV does not operate normally by following the operating instructions
  - if the LCD TV has been dropped or the cabinet has been damaged
  - when the LCD TV exhibits a distinct change in performance
- If you make adjustments yourself, adjust only those controls that are covered by the operating instructions. Adjusting other controls may result in damage and will often require extensive work by a qualified technician to restore the LCD TV to normal.
- When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitutions may result in additional damage to the unit.
- Upon completion of any service or repairs to this LCD TV, ask the service technician to perform safety checks to determine that the TV is in a safe operating condition.

**This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:**

- (1) This device may not cause harmful interference, and**
- (2) This device must accept any interference that may cause undesired operation.**

**This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.**

# FCC Information

## User Instructions

The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation .

If this equipment does cause harmful interference to radio or television receptions, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## User Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. You may find the booklet called How to Identify and Resolve Radio/TV Interference Problems helpful.

This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4 .

## Warning

User must use shielded signal interface cables to maintain FCC compliance for the product.

Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating.

For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6015P type (tandem blades) plug cap.

## IC Compliance Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

Cet appareil Numérique de classe B respecte toutes les exigences du Règlement NMB-03 sur les équipements produisant des interférences au Canada.

## Notice de Conformité IC

Cet appareil numérique de classe B respecte toutes les exigences du Règlement ICES-003 sur les équipements produisant des interférences au Canada.

## VCCI

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

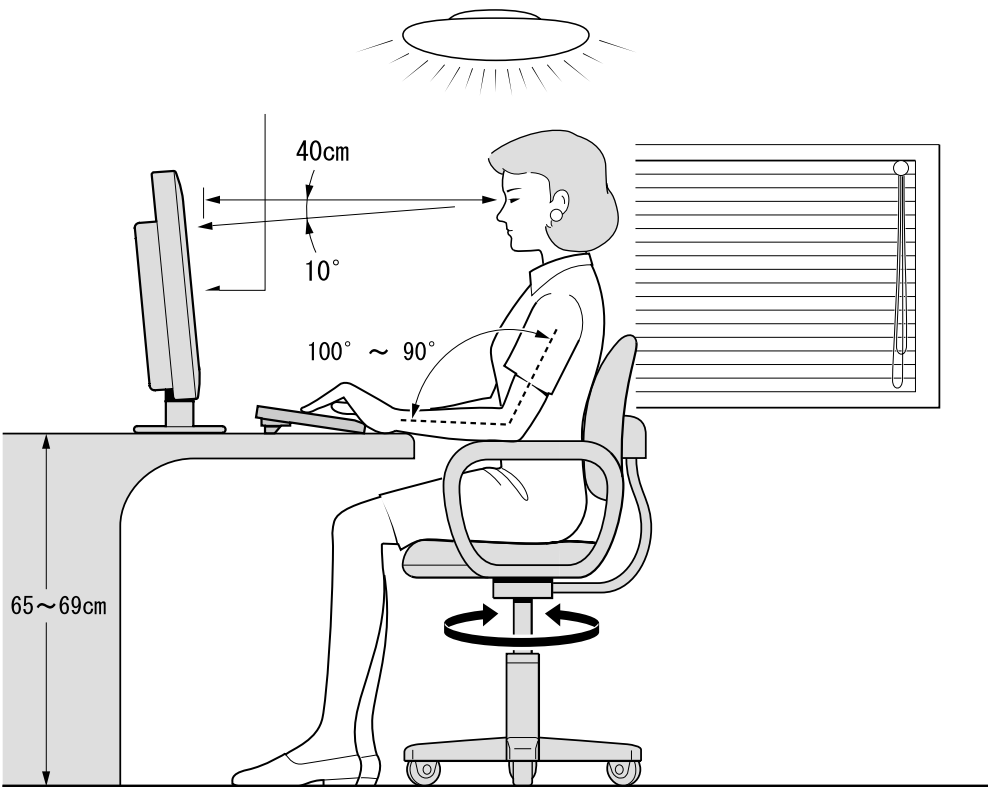
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# Using the Display Ergonomically

## ● When Using as a Computer Display

- Adjust the LCD screen so that it faces slightly downward from your eyes, and maintain a distance of at least 15 inches from your eyes to the panel.
- Adjust the illumination as well as the brightness and contrast of the LCD screen so that light reflection is minimized (300~1000 lux illumination is comfortable for your eyes).
- Recommended computer use time is 6 hours per day or less. Also, taking a break of 10~15 minutes per hour is recommended.



Keep a consistent distance between your eyes and the key items in your work area (screen, document, keyboard, etc.).

# Using an LCD Mounting Arm

## Mounting Arm Requirements

You can use a variety of wall mount arms with your LCD TV. However, they must meet the following requirements:

- Must comply with VESA Mount Interface 75mm standard.
- Must be able to sustain the weight of the LCD TV.
- Refer to the installation manual supplied with the arm for proper setup.

## Mounting Arm Installation

1. Remove all cables connected to the LCD TV.
2. Lay the LCD TV face down on a flat surface with a cushion or some type of soft material to protect the screen.
3. Using a screwdriver, remove the screws attached to the stand.
4. Follow the directions for your mounting bracket.



# Care and Maintenance

## Maintenance of the Exterior Cabinet

- Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzene, or thinner, as these might damage the surface of the unit.
- Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They may leave marks on the surface.

## Maintenance of the LCD Screen

- To clean the LCD screen, wipe the surface of the panel with a soft, dry cloth. Do not use any liquid cleaner except those specifically designed for LCD screens.



## Best Distance for TV Viewing

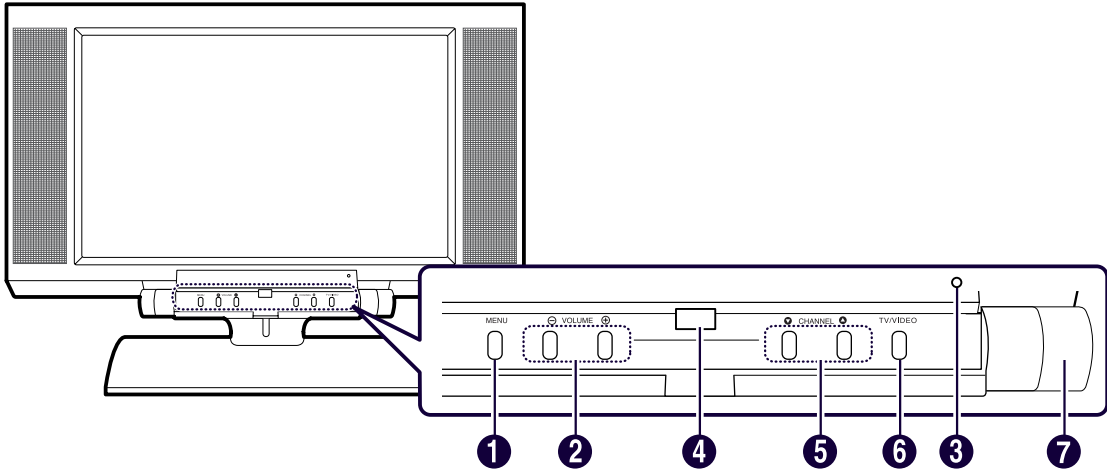
- As a rule of thumb, watch TV from a distance of about 5~7 times the screen size to prevent eye strain, in this case about 7-10 feet.

## For Optimal Use

- Since the surface of the screen is fragile, do not scratch or bump it with any hard object (e.g., any object harder than an HB pencil).
- Do not clean the surface with water.

# LCD TV Overview

## Front View



- 1 **MENU** : Brings up the on-screen menu.
- 2 **VOLUME** : Increases or decreases the volume. Also use to select the “Return/Menu” item in the on-screen menu.
- 3 **Standby Light** : Lights when unit is in Standby mode.
- 4 **Remote Control Sensor** : Point the remote here to control the TV.
- 5 **CHANNEL** : Changes channels. Also use to “Move/Adjust” items in the on-screen menu.
- 6 **TV/VIDEO** : Selects an external device connected to the TV.
- 7 **POWER** : Turns on the TV.

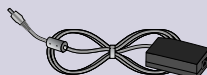


## List of Parts

Please make sure the following parts are included with your LCD TV.



Remote Control & Batteries  
(1.5V AAA)



AC Adapter



RF Connection Cable



Power Cord

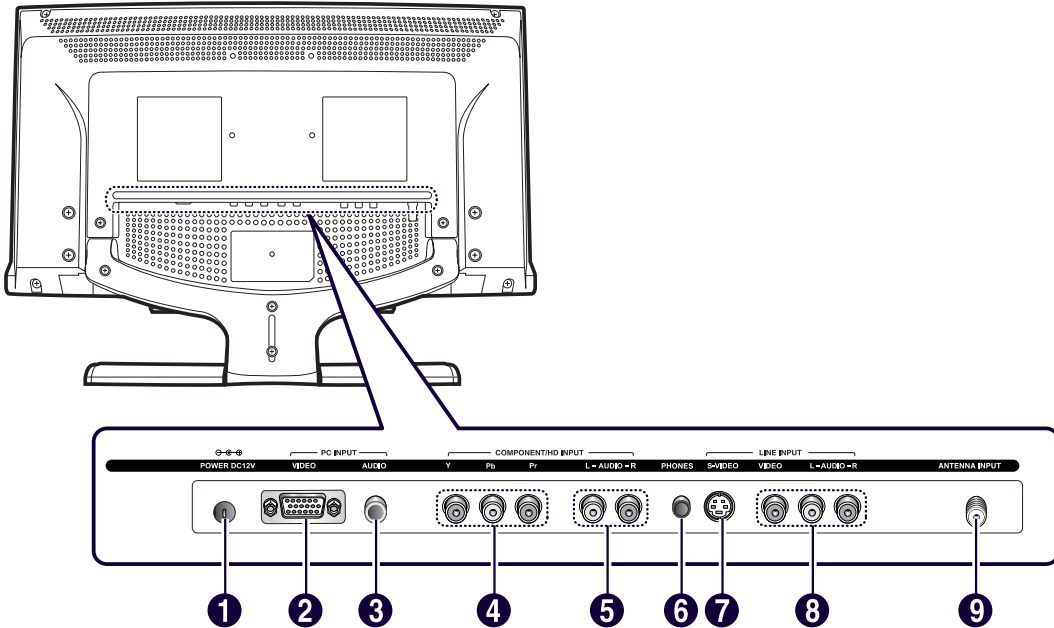


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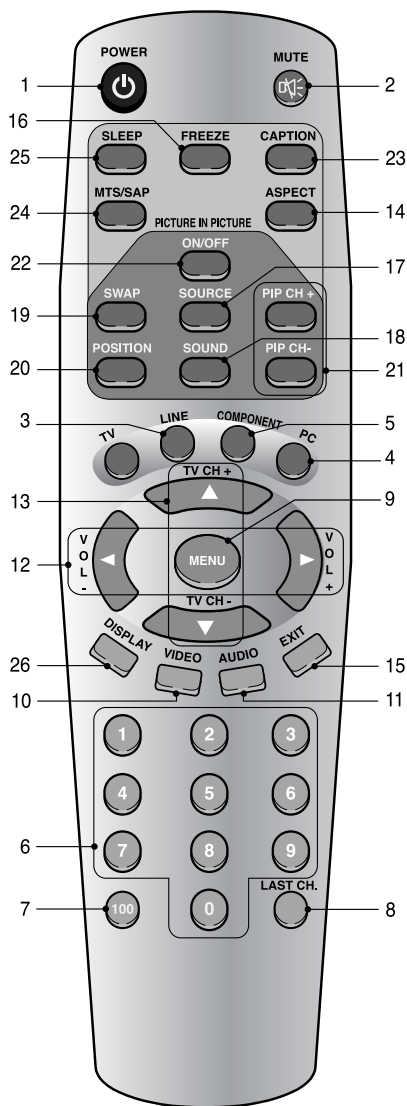
Audio/Video Connection Cables

## Rear Panel Jacks



- 1 **POWER INPUT CONNECTOR:** Connect ONLY to the AC adapter supplied with this product.
- 2 **PC VIDEO INPUT JACK:** Connect to a PC monitor output.
- 3 **PC AUDIO INPUT JACK:** Connect to a PC audio output.
- 4 **COMPONENT/HD VIDEO (Y, Pb, Pr) INPUT JACKS:** Connect to a DVD player or a DTV receiver.
- 5 **COMPONENT/HD AUDIO INPUT JACKS:** Connect to a DVD player or a DTV receiver.
- 6 **PHONES JACK:** Connect to headphones. When you are listening with headphones, the sound from the speakers is muted.
- 7 **S-VIDEO INPUT JACK:** Connect to a DVD player or other component with an S-VIDEO jack for better picture quality.
- 8 **LINE (VIDEO/AUDIO) INPUT JACK:** Connect to a VCR, DVD player or camcorder.
- 9 **ANTENNA INPUT JACK:** Connect to an antenna or cable TV jack.

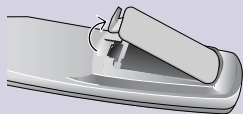
# Remote Control



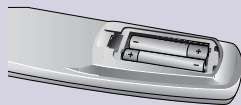
- 1 POWER:** Turns the TV on and off.
- 2 MUTE:** Temporarily mutes the sound.
- 3 LINE:** Displays the Composite or S-Video Input.
- 4 PC:** Displays the PC Input.
- 5 COMPONENT:** Displays the Component Video Input.
- 6 NUMBER BUTTONS :** Selects channels directly on the TV.
- 7 100:** Selects channels 100 or higher. For example, to select channel 121, press "100," then press "2", "1."
- 8 LAST CH.:** Moves to the previous channel.
- 9 MENU:** Displays the OSD menu.
- 10 VIDEO:** Configures various video settings.
- 11 AUDIO:** Configures various audio settings.
- 12 VOLUME (-/+):** Increases or decreases the volume.
- 13 TV CH +/-:** Changes channels.
- 14 ASPECT:** Adjusts the picture size.
- 15 EXIT:** Cancels the current configuration.
- 16 FREEZE:** Freezes a moving picture on the screen.
- 17 SOURCE:** Selects the signal source for the PIP window.
- 18 SOUND:** Changes the audio signal source between the main screen and the PIP window.
- 19 SWAP:** Changes the video signal source between the main screen and the PIP window.
- 20 POSITION:** Selects the location of the PIP window.
- 21 PIP CH +/-:** Selects the channel of the PIP window.
- 22 ON/OFF(PIP):** Turns PIP on or off.
- 23 CAPTION:** Turns the Closed Captions display on or off.
- 24 MTS/SAP:** Selects stereo, mono or Secondary Audio Program (SAP broadcast).
- 25 SLEEP:** Selects a preset time interval for automatic shutoff.
- 26 DISPLAY:** Displays the current channel and the audio-video settings.



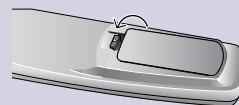
## Installing Batteries in the Remote Control



**1** Slide off the cover in the direction of the arrow.



**2** Install two AAA size batteries according to the correct polarity.



**3** Close the cover in the direction of the arrow.

## Using the Remote Control

The remote control works properly in the following range: 20~30 feet from the TV, 10 feet to the left or right of the TV, and within 30 degrees from the remote control sensor of the TV.



## The remote control does not work properly!

### Check!

**1** Are the polarities (+ and -) of the batteries aligned correctly?

**2** Are the batteries dead?

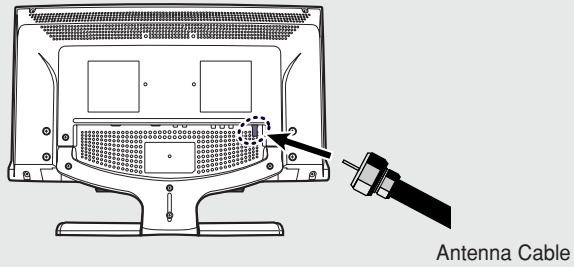
**3** Is the power cord plugged in properly or is there a power failure?


**4** Is fluorescent lighting or a neon sign near the unit?

# Connecting the TV Antenna

If you do not have a cable system, you will need to connect an antenna to your TV.

## Connection Procedures



**1** Connect the TV antenna cable... 

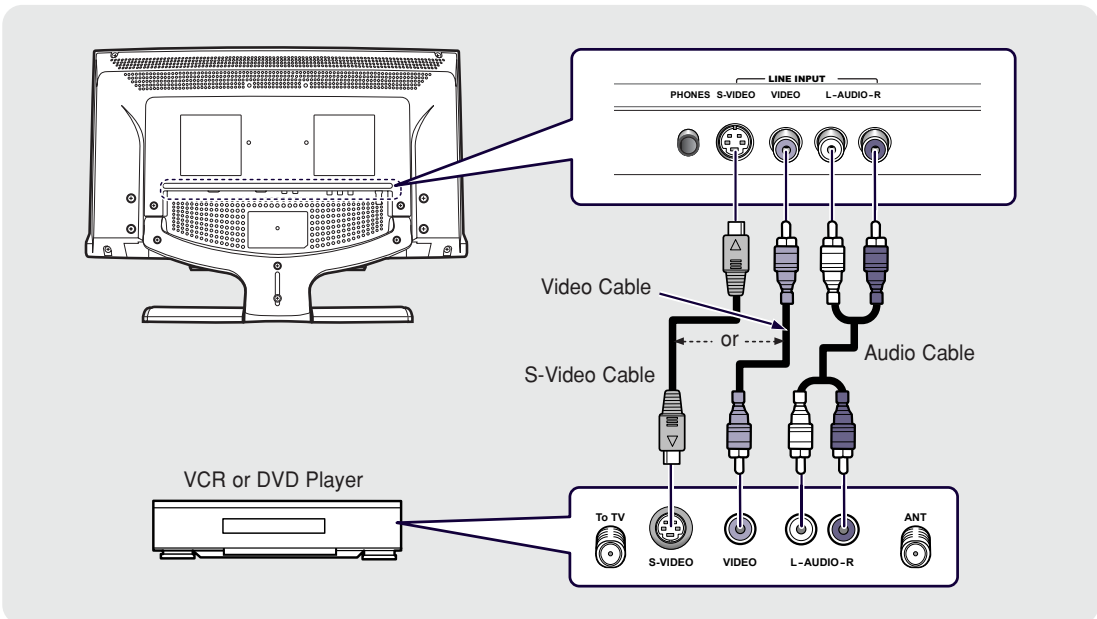
**2** ...to the ANTENNA INPUT jack on the back panel of the TV.

# Connecting a VCR or DVD Player

## Connecting the Video/S-Video and Audio Jack

Do not connect the Video cable and the S-Video cable at the same time.  
You should connect only one cable at a time.

### Connection Procedures



# 1

Connect the antenna cable to the ANTENNA IN terminal on the back of your VCR.

# 2

Connect the VIDEO/AUDIO INPUT jack of the TV and the video/audio output jack of your VCR or DVD with the video/audio cables (connect the cables to the terminals of the same color).

- You can use the S-Video cable to connect a VCR or a DVD player for better video quality.
- If your VCR does not support stereo sound, connect the mono audio out jack to the AUDIO INPUT (left) jack.



### To watch a video with a VCR (A/V Connection)

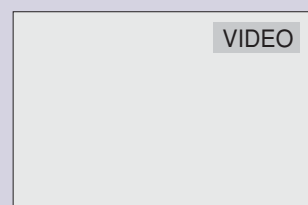
# 1

Turn the TV on, and select 'VIDEO' using the LINE button on the remote control.

- If you have connected an S-Video cable, select 'S-VIDEO'.

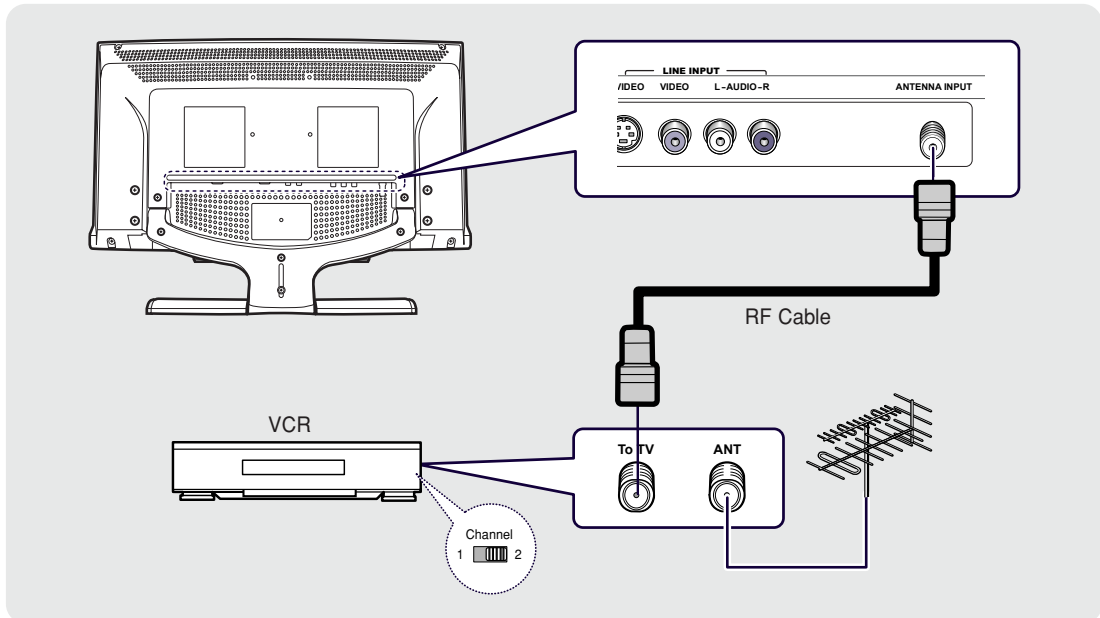
# 2

Turn the VCR on, insert the tape, and press the Play button.



## Connecting the Antenna Input Jack

### Connection Procedures

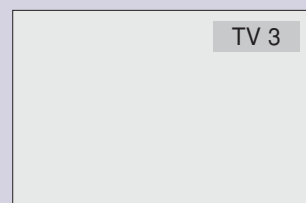


- 1** Connect the antenna cable to the ANTENNA IN terminal on the back of the VCR.
- 2** Connect a coaxial cable between the ANTENNA OUT terminal on the VCR and the antenna terminal on the TV.



### To watch a video with a VCR (RF Connection)

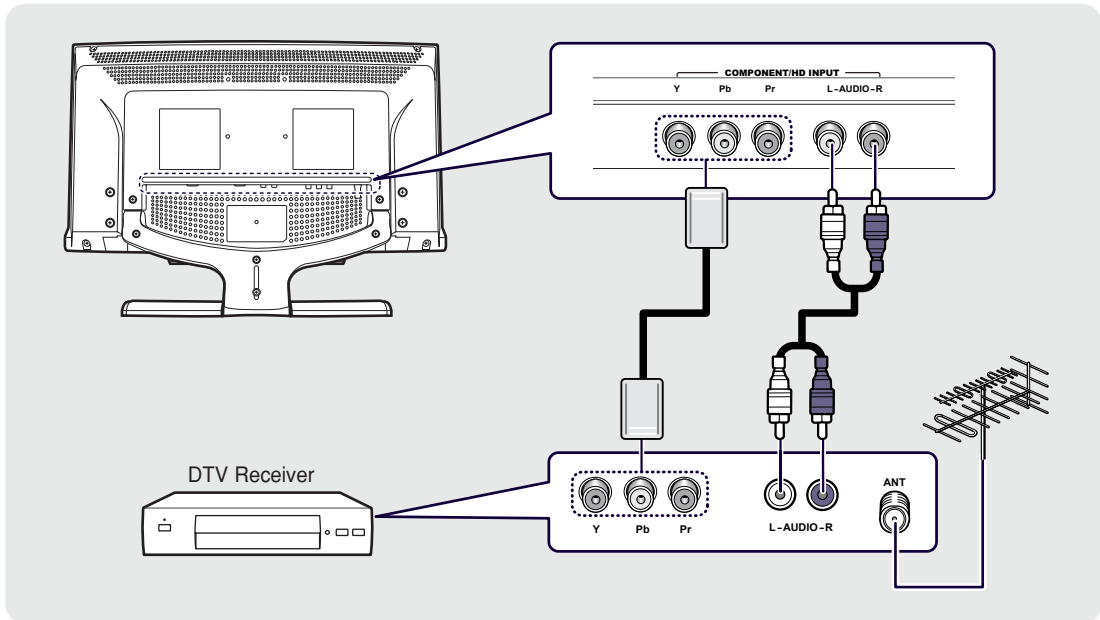
- 1** Set the channel select switch on the back of the VCR to 3 or 4.
- 2** Change the TV channel to 3 or 4 according to your selection of the channel select switch.
- 3** Turn the VCR on, insert the tape and press the Play button.





# Connecting a DTV Receiver

## Connection Procedures

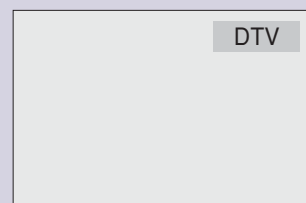


- 1** Connect the COMPONENT/HD INPUT jack on the TV and the component video output jack of your DTV receiver with the component video connectors (Y, Pb, and Pr).
- 2** Connect the left and right COMPONENT/HD AUDIO INPUT jacks of the TV to the component audio output jack of the DTV receiver using the audio cables.



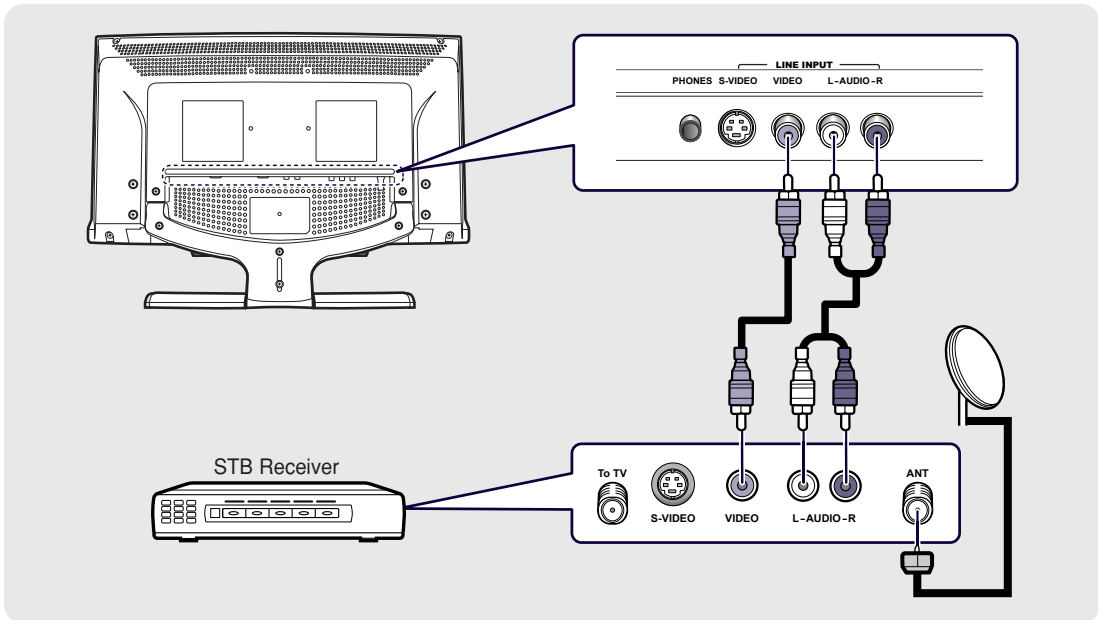
### To watch DTV

- 1** Turn the TV on and select 'DTV' using the COMPONENT button on the remote control.
- 2** Turn the DTV receiver on and select the desired channel.



# Connecting an STB Receiver

## Connection Procedures

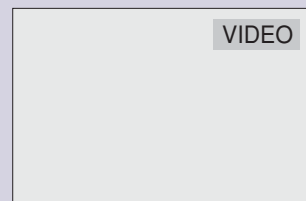


- 1** Connect your STB receiver antenna cable to the antenna signal input jack on the STB receiver tuner.
- 2** Connect the VIDEO/AUDIO INPUT jack of the TV and the video/audio output jack of the STB receiver with the video/audio cables.



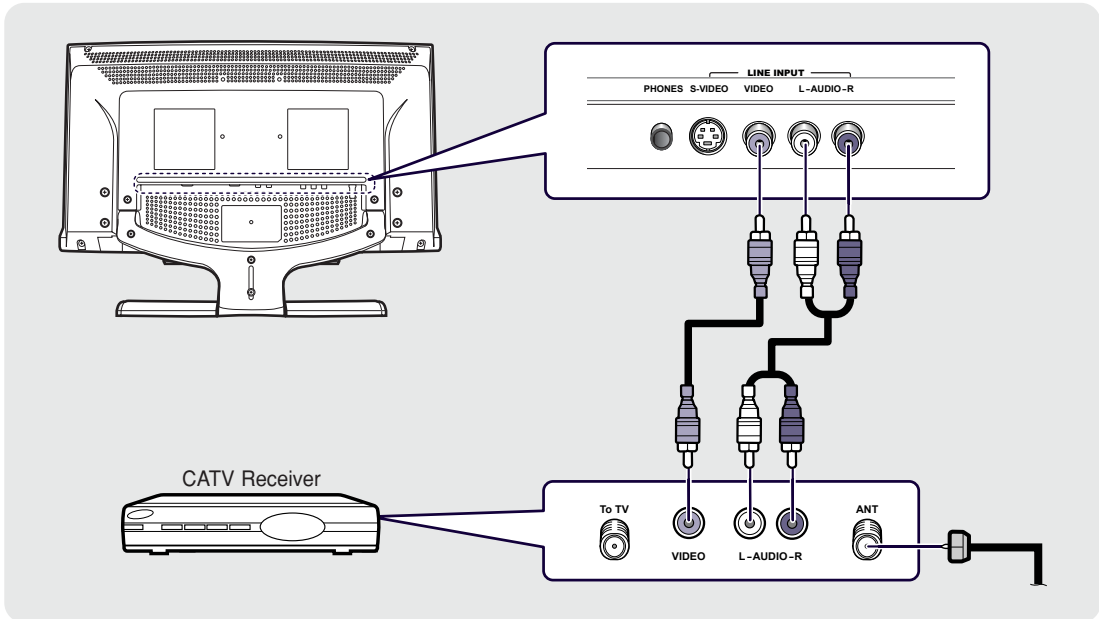
### To watch the STB Receiver

- 1** Turn the TV on and select 'VIDEO' using the LINE button on the remote control.
- 2** Turn the STB receiver on and select the desired channel using the remote control of the STB receiver.



# Connecting a CATV Receiver

## Connection Procedures

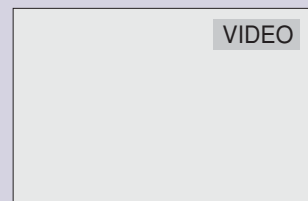


- 1** Connect the cable TV antenna cable to the antenna input jack of the cable TV receiver.
- 2** Connect the VIDEO/AUDIO INPUT jack of the TV and the video/audio output jack of the cable TV receiver using the video/audio cables (connect the cables to the terminals of the same color).



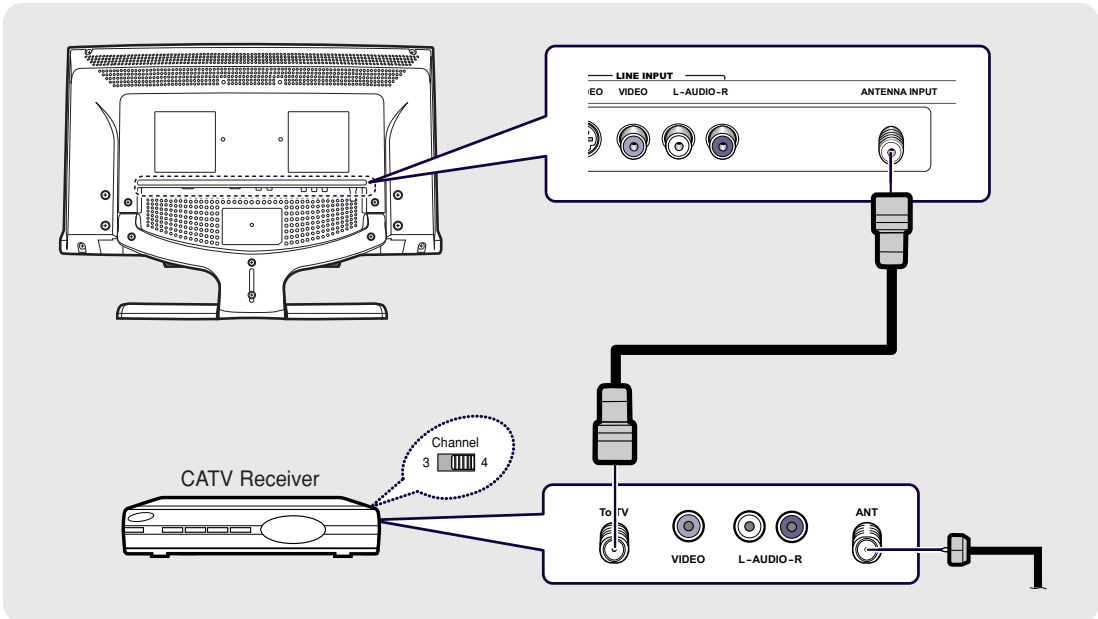
### To watch Cable TV (A/V Connection)

- 1** Turn the TV on, and select 'VIDEO' using the LINE button on the remote control.
- 2** Turn the cable TV receiver on and select the desired channel using the remote control of the receiver.



## Connecting the Antenna Input Jack

### Connection Procedures

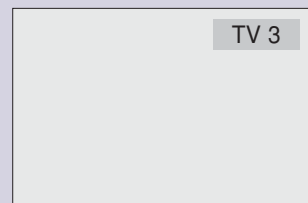


- 1** Connect the cable TV antenna cable to the ANTENNA IN jack on the back of the cable TV receiver.
- 2** Connect a coaxial cable between the ANTENNA INPUT jack of the TV and the antenna output jack of the cable TV receiver.



### To watch Cable TV (RF Connection)

- 1** Set the channel select switch on the back of the cable TV receiver to 3 or 4.
- 2** Turn the TV on and change the TV channel to 3 or 4 according to the selection of the channel select switch.
- 3** Turn the cable TV receiver on and select the desired channel using the remote control of the cable TV receiver.



# Check Before Using

Please go through the following check list before using the TV.

**1**

**Is the antenna cable connected properly?**



**2**

**Is the AC adapter connected properly?**

- When you connect the adapter to the unit, turn the power switch on the front panel to "off", and then connect the adapter cable.
- When not using the adapter for a long period of time, separate the AC adapter from both the LCD TV and the wall outlet.



**3**

**Are the remote control batteries installed properly?**



**4**

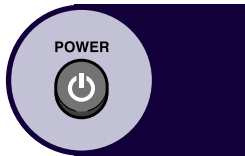
**Have the channels been memorized? Refer to page 24.**



**5**

**Are all external devices connected properly?**

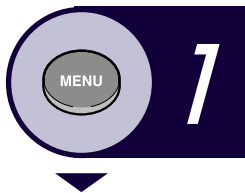
# Watching TV



## Turning the TV On and Off

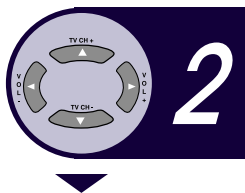
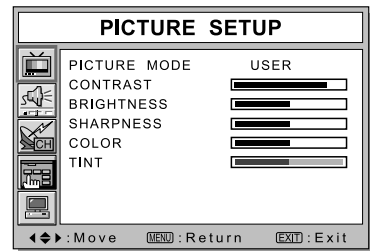
Rotate the power switch on the front panel downward to turn on the unit.

- When you turn the power ON, the screen appears and the POWER/STANDBY light is turned off.
- When you turn the power OFF, the screen goes blank, and the POWER/STANDBY light turns on.

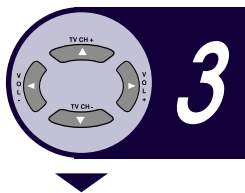
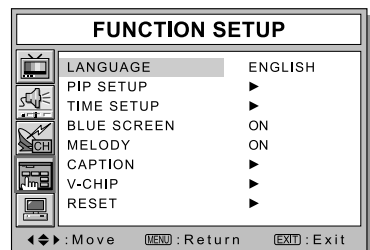


## Selecting the Menu Language

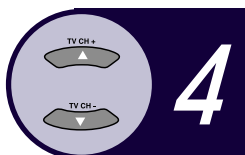
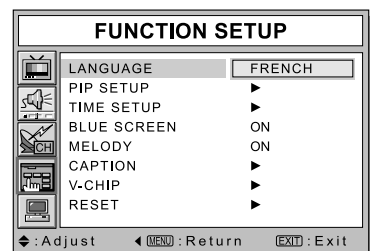
- Press the MENU button. The OSD MENU is displayed.



Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.

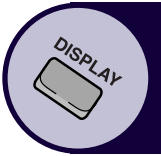


Select LANGUAGE using the TV CH+/- buttons and then press the VOL+ button.



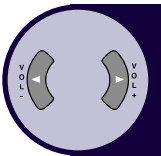
Select the desired menu language using the TV CH+/- buttons.

- Press the EXIT button to exit the menu.



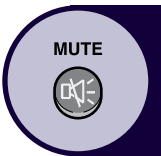
### Viewing the Status Information

Press the DISPLAY button on the remote control. The TV will display the input source, picture mode, sound mode, MTS mode, current time, V-chip, and audio signal you are listening to.



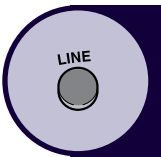
### Adjusting the Volume

- Adjust the volume using the VOL+/- buttons.



### Muting the Sound

- Press the MUTE button.  
You can conveniently use the MUTE button when a telephone or door bell rings.  
To cancel, press the MUTE button again.



### Viewing a Video or DVD

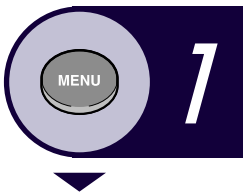
- Press the LINE button.  
For connection and setup procedures, refer to page 15.

# Memorizing Channels

The LCD TV can memorize and store all available channels for both antenna and cable TV. After the channels are memorized, use the TV CH+/- buttons to scan through them. This eliminates the need to change channels using the number keys. There are three steps for memorizing channels: 1) Select a broadcast source; 2) Memorize channels (automatic); and 3) Add and/or Delete channels (manual).

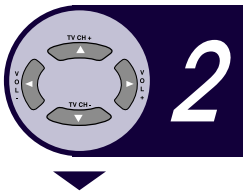
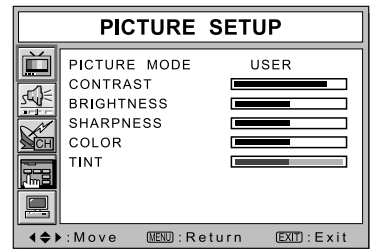
## Selecting the Broadcast Source

Before your television can begin memorizing channels, you must specify the type of signal source that is connected to the TV (i.e., an antenna or a cable TV system).

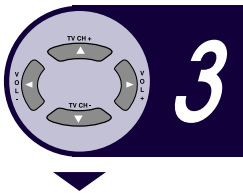
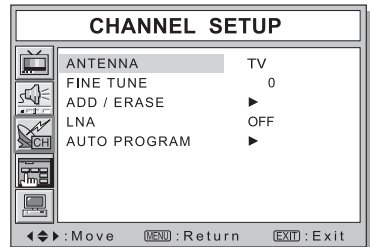


**Press the MENU button.**

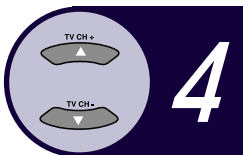
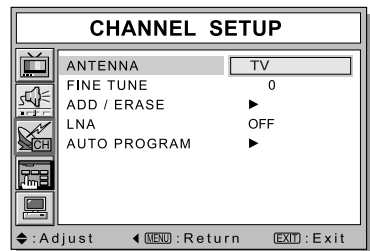
- The OSD MENU is displayed.



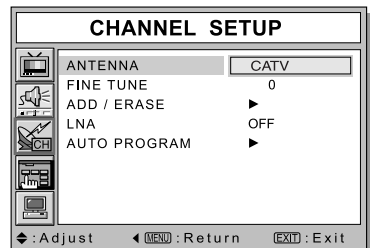
**Select CHANNEL SETUP using the TV CH+/- buttons and then press the VOL+ button.**



**Select ANTENNA using the TV CH+/- buttons and then press the VOL+ button.**



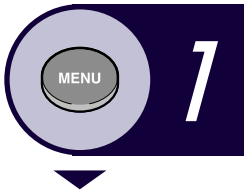
**Select TV for Antenna or CATV for Cable TV using the TV CH+/- buttons.** If you are not sure which type of cable system you have, contact your cable company.



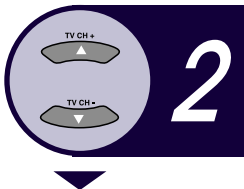


## Storing Channels in Memory (Automatic Method)

The TV automatically searches for all available channels and stores them to memory. This takes approximately one or two minutes.



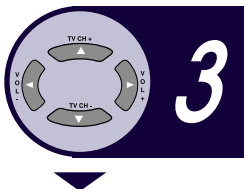
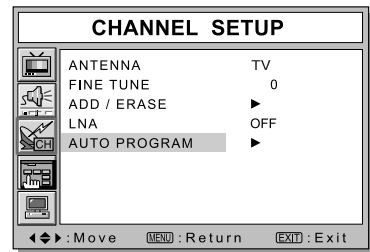
First, select the correct signal source (TV, CATV). See steps 1~4 on the previous page.



Select **AUTO PROGRAM** using the **TV CH+/-** buttons and then press the **VOL+** button.

The TV will begin storing all available channels.

After all available channels have been stored, the **CHANNEL SETUP** menu reappears.



Press the **EXIT** button to exit the menu.

### Viewing Saved Channels

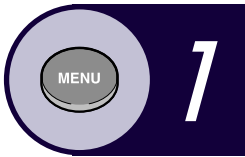
Press the **TV CH+/-** buttons.

- Only saved channels are selected.
- The **AUTO MEMORY** function can select channels using the **TV CH+/-** buttons only when more than 3 channels have been saved.



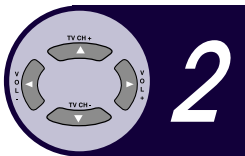
## Adding and Erasing Channels (Manual Method)

You can use this function to add channels and to delete unwanted channels after the auto channel search is complete.

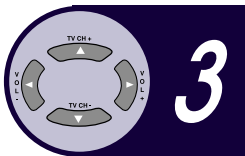
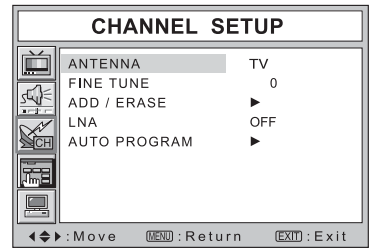


**Press the MENU button.**

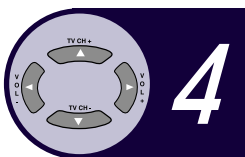
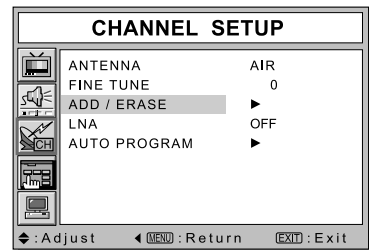
- The OSD MENU is displayed.



**Select CHANNEL SETUP using the TV CH+/- buttons and then press the VOL+ button.**

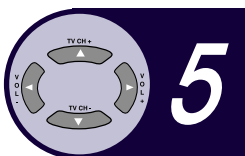
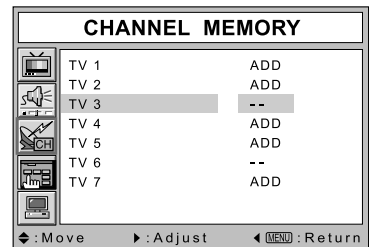


**Select ADD/ERASE using the TV CH+/- buttons and then press the VOL+ button.**



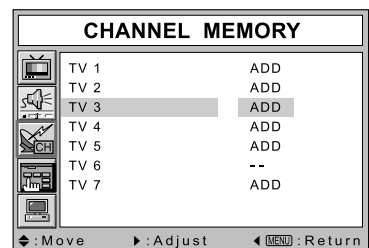
**Adding a channel:**  
**Select a channel to add using the TV CH+/- buttons and then press the VOL+ button.**

- The OSD changes from ADD to -- .



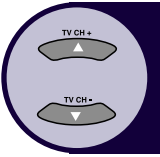
**Deleting a channel:**  
**Select a channel to delete using the TV CH+/- buttons and then press the VOL+ button.**

- The OSD changes from -- to ADD.



## Changing Channels

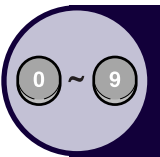
You can change channels on your LCD TV by using the TV CH+/- buttons, or by direct selection using the number buttons. You can use the number buttons to tune to any channel (even one that has been erased or has not been memorized).



### Using the CHANNEL buttons

Press the TV CH+/- buttons to change channels.

The TV changes each channel in order, up or down, depending on which button you press. You will see all the channels that the TV has memorized (the TV must have memorized at least three channels). You will not see channels that were not memorized or have been erased.



### Using the NUMBER buttons

To select single-digit channels (0~9) faster, press "0" before the single digit. Example: For channel 4, press "0", then "4".

To select channel 100 or higher, press the 100 button first. Example: For channel 122, press "100", then "2", then "2".

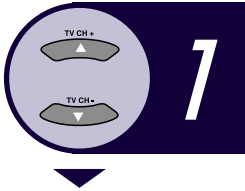


### Viewing the Previous Channel

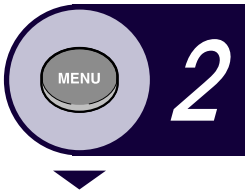
Press the LAST CH. button on the remote control to select the last channel you were watching.

# If Picture Quality is Poor or Unstable

Use fine tuning to adjust a particular channel for better picture quality when noise interferes, color quality is poor, or the screen is unstable.

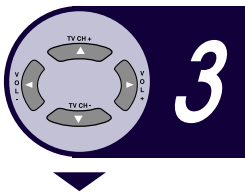


Select the channel to tune using the numeric or channel buttons.

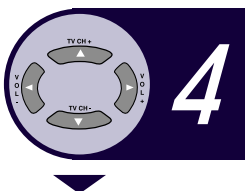
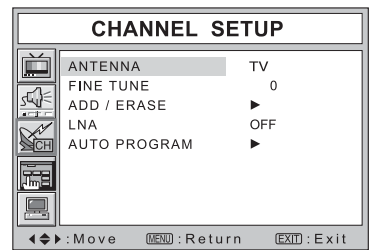


Press the MENU button.

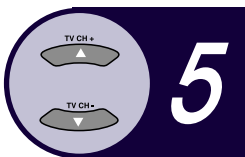
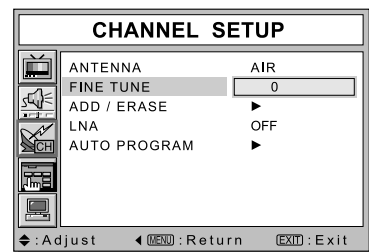
- The OSD MENU is displayed.



Select CHANNEL SETUP using the TV CH+/- buttons and then press the VOL+ button.

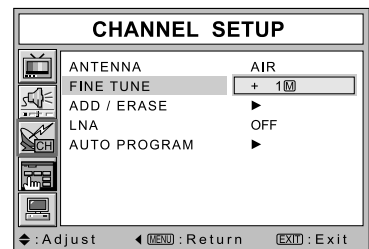


Select FINE TUNE using the TV CH+/- buttons and then press the VOL+ button.



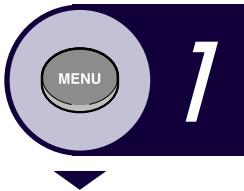
Adjust the screen until a clearer picture appears using the TV CH+/- buttons.

- Press the EXIT button to exit the menu.



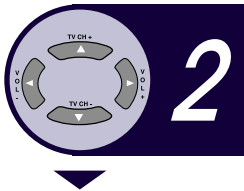
# LNA (Low Noise Amplifier)

If the TV is operating in a weak signal area, sometimes the LNA function can improve the reception (a low noise pre-amplifier boosts the incoming signal).

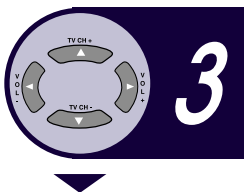
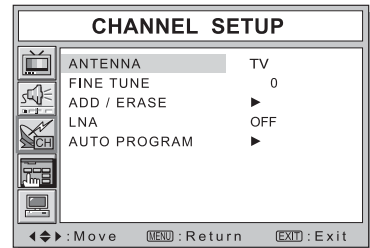


**Press the MENU button.**

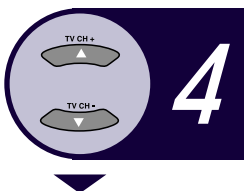
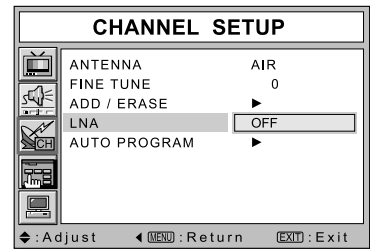
- The OSD MENU is displayed.



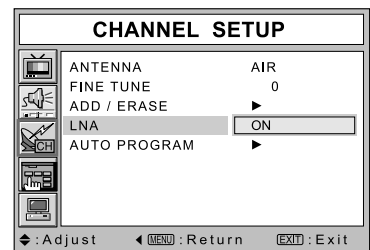
**Select CHANNEL SETUP using the TV CH+/- buttons and then press the VOL+ button.**



**Select LNA using the TV CH+/- buttons and then press the VOL+ button.**



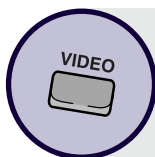
**Select ON using the TV CH+/- buttons.**



**Press the EXIT button to exit the menu.**

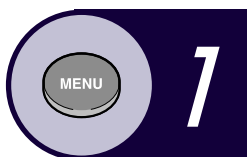
# Selecting the Picture Mode

You can select one of four Picture Modes, or preset video adjustments. These modes include USER, STANDARD, DYNAMIC, or MILD.



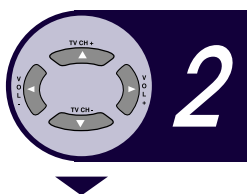
**Shortcut: Press the VIDEO button.**

- The video menu changes to USER → STANDARD → DYNAMIC → MILD.

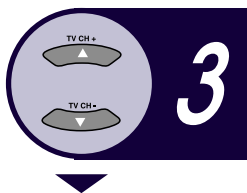
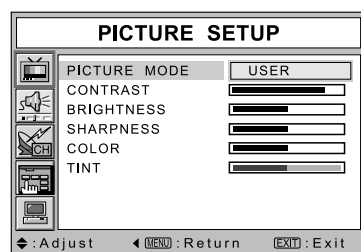


**Press the MENU button.**

- The OSD MENU is displayed.

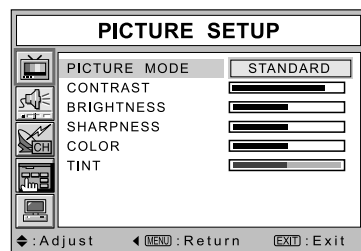


**Select PICTURE SETUP using the TV CH+/- buttons and then press the VOL+ button twice.**



**Select the desired PICTURE MODE using the TV CH+/- buttons.**

- The PICTURE MODE is changed to USER → STANDARD → DYNAMIC → MILD.



**Press the EXIT button to exit the menu.**

## PICTURE MODES

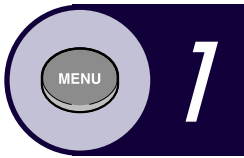
**STANDARD** : Select when viewing the TV in bright light conditions.

**DYNAMIC** : Select to increase picture clarity and sharpness.

**MILD** : Select when viewing the TV in low-light conditions to lessen eye strain.

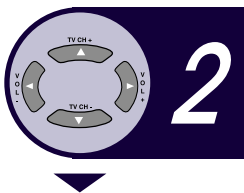
**USER** : Select to return the settings to your personal preferences. (To customize your video preferences, refer to page 31.)

# Manually Adjusting Picture Settings

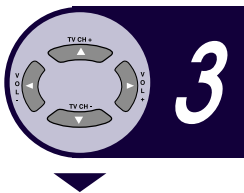
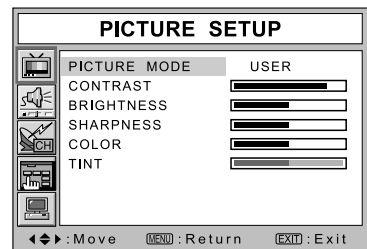


Press the **MENU** button.

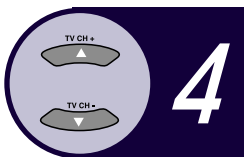
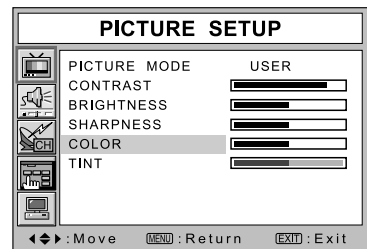
- The OSD MENU is displayed.



Select **PICTURE SETUP** using the **TV CH+/-** buttons and then press the **VOL+** button.



Select the desired item to adjust using the **TV CH+/-** buttons and then press the **VOL+** button.



Select the desired status using the **VOL-** and **VOL+** buttons.

- During adjustment, an additional adjustment window is displayed. This window disappears and changes are applied when 3 seconds have elapsed after the last input. In addition, **PICTURE MODE** is automatically changed to **USER** mode.
- Press the **EXIT** button to exit the menu.



## PICTURE SETTINGS

- CONTRAST** : Adjusts the difference in brightness between an object and the background.
- BRIGHTNESS** : Adjusts the brightness of the screen.
- SHARPNESS** : Adjusts the sharpness of an object image.
- COLOR** : Adjusts the color density.
- TINT** : Adjusts the color of an object.

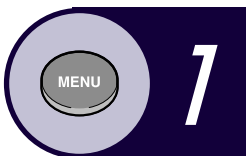
# Selecting the Sound Mode

You can select one of four Sound Modes, or preset audio adjustments. These modes include USER, STANDARD, MUSIC, or SPEECH.



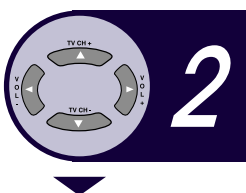
**Shortcut: Press the AUDIO button.**

- The Sound Mode changes to USER → STANDARD → MUSIC → SPEECH.

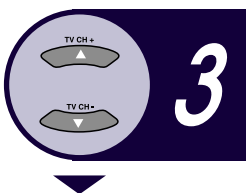
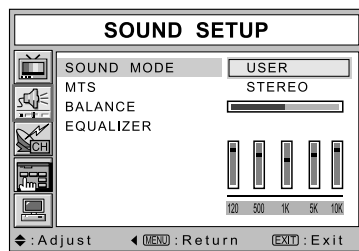


**Press the MENU button.**

- The OSD MENU is displayed.

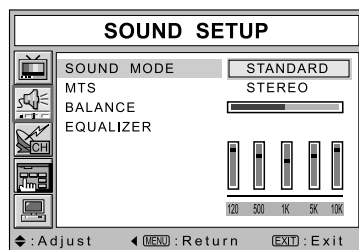


**Select SOUND SETUP using the TV CH+/- buttons and then press the VOL+ button.**



**Select the desired SOUND MODE using the TV CH+/- buttons.**

- The SOUND MODE is changed to USER → STANDARD → MUSIC → SPEECH.



**Press the EXIT button to exit the menu.**

## SOUND MODES

**STANDARD** : Select to listen to sound normally.

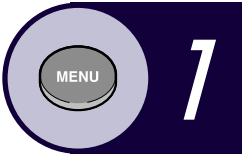
**MUSIC** : Select to listen to the original sound.

**SPEECH** : Select to listen to clear voice sound.

**USER** : Select to return to your personal preferences.  
(To customize your audio preferences, refer to page 33.)

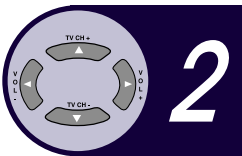


You can adjust the audio BALANCE and EQUALIZER settings directly.

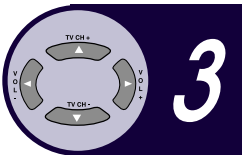
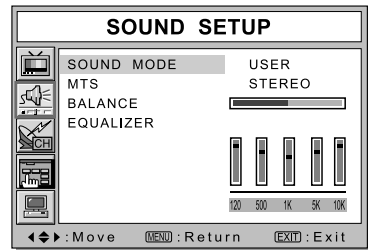


**Press the MENU button.**

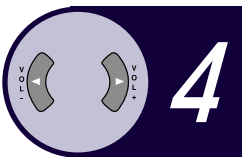
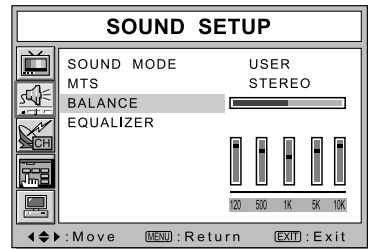
- The OSD MENU is displayed.



**Select SOUND SETUP using the TV CH+/- buttons and then press the VOL+ button.**

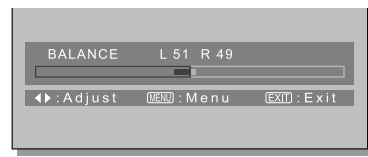


**Select BALANCE using the TV CH+/- buttons and then press the VOL+ button.**



**Select the desired status using the VOL- and VOL+ buttons.**

- During adjustment, an additional adjustment window is displayed. This window disappears and changes are applied when 3 seconds have elapsed after the last input. In addition, SOUND MODE is automatically changed to USER mode.
- **BALANCE:** Determines the volume ratio between the left and right speakers.
- Press the EXIT button to exit the menu.



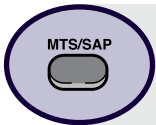
### Adjusting the EQUALIZER

**EQUALIZE:** Determines the volume of each frequency range (low to high tones).

- |  |   |
|--|---|
| <p><b>1</b> Move to the EQUALIZER item using the TV CH+/- buttons.</p> <p><b>2</b> Move to the desired frequency using the VOL+ button.</p> <ul style="list-style-type: none"> <li>● 120fl (Low Tone)... 1K (Mid Tone)... 10K (High Tone)</li> </ul> | <p><b>3</b> Select the desired status using the TV CH+/- buttons.</p> <ul style="list-style-type: none"> <li>● When you have adjusted the EQUALIZER, the SOUND MODE is automatically changed to USER MODE.</li> </ul> |
|--|---|

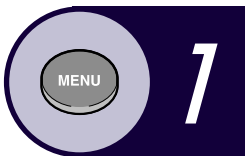
# Choosing a Multi-Channel Sound (MTS) Soundtrack

Depending on the particular program being broadcast, you can listen to Stereo, Mono, or a Secondary Audio Program (SAP). SAP audio is usually a foreign-language translation, although sometimes it has unrelated information like news or weather.



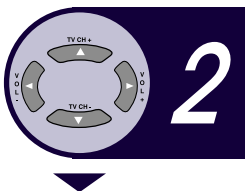
**Shortcut: Press the MTS button.**

- The MTS mode changes to STEREO → MONO → SAP mode.

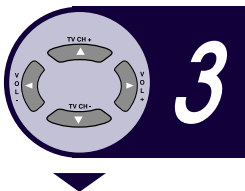
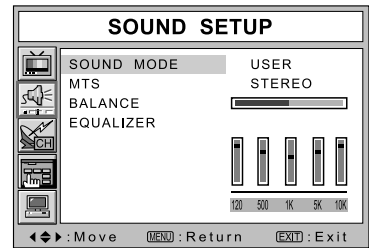


**Press the MENU button.**

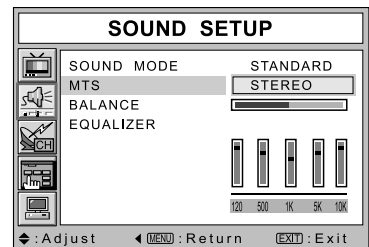
- The OSD MENU is displayed.



**Select SOUND SETUP using the TV CH+/- buttons and then press the VOL+ button.**

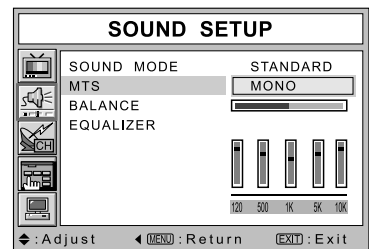


**Select MTS using the TV CH+/- buttons and then press the VOL+ button.**



**Press the TV CH+/- buttons.**

- The MTS mode is changed to STEREO → MONO → SAP.
- Press the EXIT button to exit the menu.



## SOUND MODES

- Choose STEREO for channels that are broadcasting in stereo.
- Choose MONO for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
- Choose SAP to listen to the Secondary Audio Program, which is usually a foreign-language translation.

# Changing the Screen Size

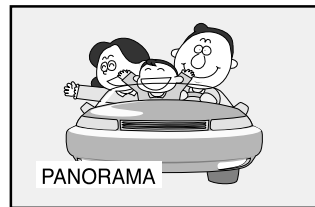
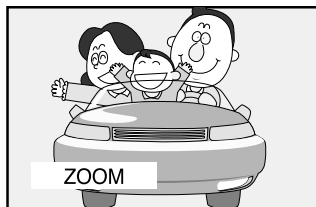
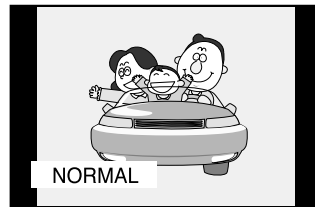
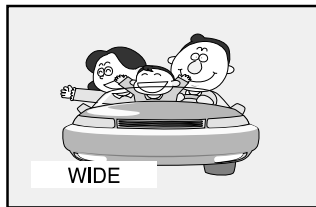
You can adjust the screen size for each video source.

ASPECT



Press the ASPECT button.

- The screen size changes to WIDE → NORMAL → ZOOM → PANORAMA (you can only select WIDE or NORMAL in Component and PC input modes.)



## Screen Size Options

- WIDE mode** : Sets the picture to 16:9 wide mode.
- NORMAL mode** : Sets the picture to 4:3 normal mode.  
This is a standard TV screen size.
- ZOOM Mode** : Magnifies the size of the picture on the screen.
- PANORAMA mode** : Sets the picture to the wide aspect ratio of a panoramic picture.

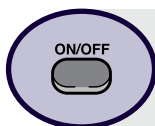


Note

- You can select only WIDE, NORMAL (4:3) screen size in the Component and PC Modes.

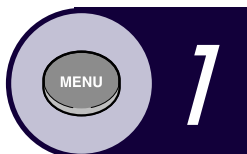
# Viewing Picture-in-Picture

You can watch two video sources on the screen simultaneously.



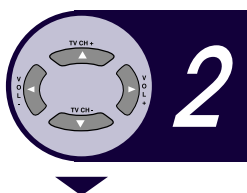
**Shortcut: Press the ON/OFF button.**

- Turns the PIP screen on or off.

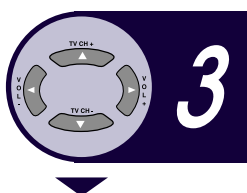
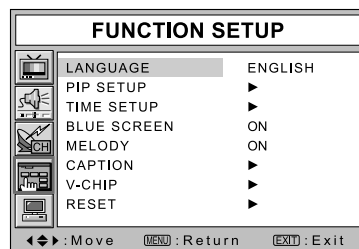


**Press the MENU button.**

- The OSD MENU is displayed.

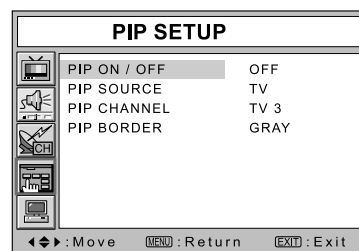


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



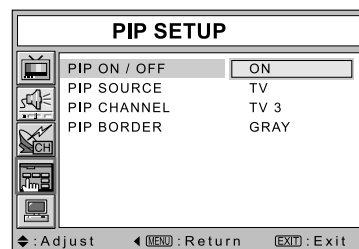
**Select PIP SETUP using the TV CH+/- buttons and then press the VOL+ button.**

- The PIP SETUP menu is displayed.



**Select PIP ON/OFF using the TV CH+/- buttons and then press the VOL+ button. Select ON or OFF using the TV CH+/- buttons.**

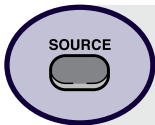
- PIP mode is turned on or off.
- Press the EXIT button to exit the menu.



## Note

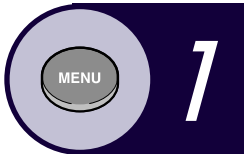
- Since this product has a single tuner, you cannot watch two TV channels simultaneously in PIP mode.
- You can only listen to one audio output at a time (from either the main screen or the PIP window).
- Refer to the PIP configuration table (see page 71).

You can change the video source of the PIP window to any externally connected device.



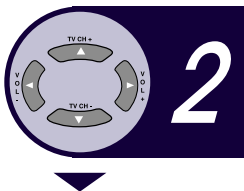
**Shortcut: Press the SOURCE button.**

- The source of the PIP window is changed to the next video signal of any externally connected device.

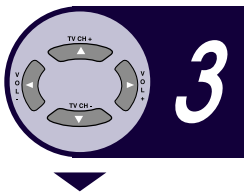
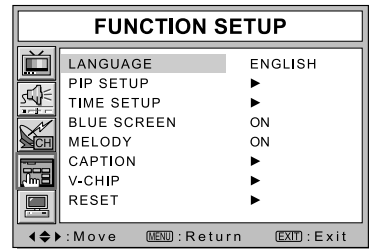


**Press the MENU button.**

- The OSD MENU is displayed.

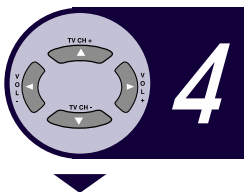
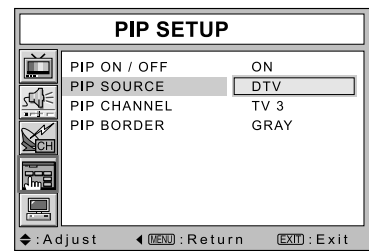


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



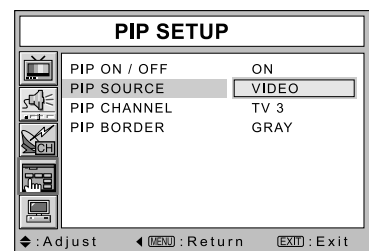
**Select PIP SETUP using the TV CH+/- buttons and then press the VOL+ button.**

- The PIP SETUP menu is displayed.



**Select PIP SOURCE using the TV CH+/- buttons and then press the VOL+ button. Select the desired external input signal.**

- The video source is changed in the following order: TV → VIDEO → S-VIDEO → DTV



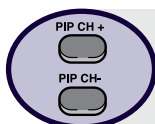
**Press the EXIT button to exit the menu.**



- Since this product has a single tuner, you cannot watch two TV channels simultaneously in PIP mode.

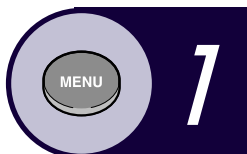
# Changing the PIP Window Channel

When the PIP window shows normal broadcasting (TV and CATV) channels, you can change the PIP window channel.



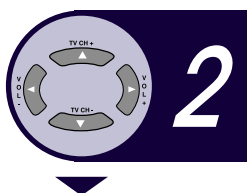
**Shortcut: Press the PIP CH+/- buttons when the PIP window is displayed.**

- The PIP window channel is changed.

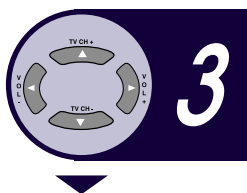
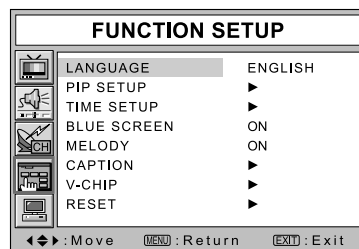


**Press the MENU button.**

- The OSD MENU is displayed.

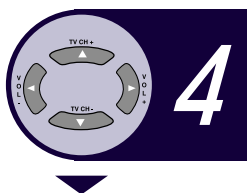
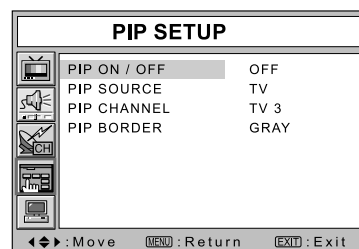


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



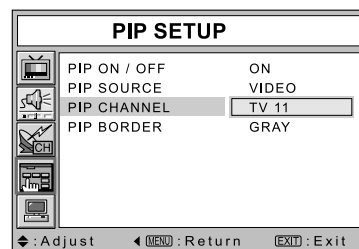
**Select PIP SETUP using the TV CH+/- buttons and then press the VOL+ button.**

- The PIP SETUP menu is displayed.



**Select PIP CHANNEL using the TV CH+/- buttons and then press the VOL+ button.**  
**Select the desired external input signal using the TV CH+/- buttons.**

- The channel changes.



**Press the EXIT button to exit the menu.**

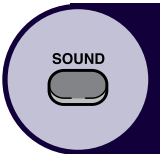


## Note

- Since this product has a single tuner, you cannot watch two TV channels simultaneously when in PIP mode.

## Selecting Audio in the PIP Screen Mode

You can select the desired audio source from either the main screen, or the PIP window.

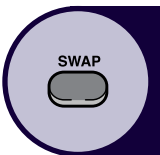


### Press the SOUND button.

- The audio source is changed between MAIN and SUB.  
When MAIN is selected: Audio from the main screen is heard.  
When SUB is selected: Audio from the PIP window is heard.

## Swapping the Main and the PIP Window

You can swap the video sources of the main screen and the PIP window.

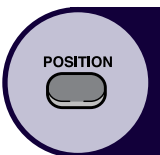


### Press the SWAP button.

- The video sources of the main screen and PIP window are swapped.

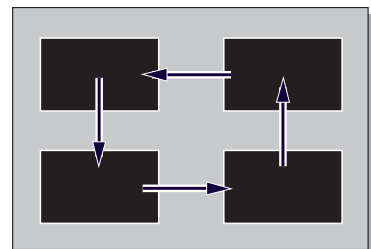
## Changing the Position of the PIP Window

You can set the position of the PIP window to any corner of the screen.



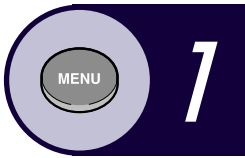
### Press the POSITION button.

- The PIP window moves to each corner of the screen.



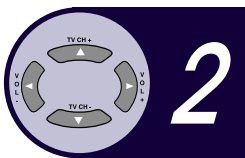
# Changing the Border Color of the PIP Window

You can change the border color of the PIP window.

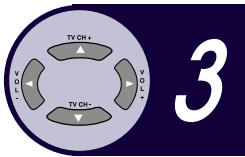
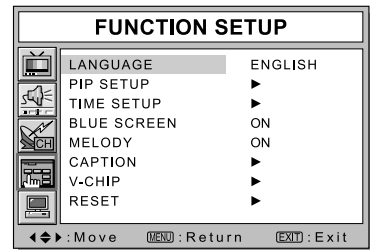


Press the **MENU** button.

- The OSD MENU is displayed.

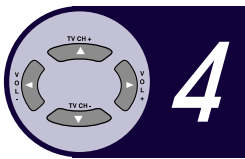
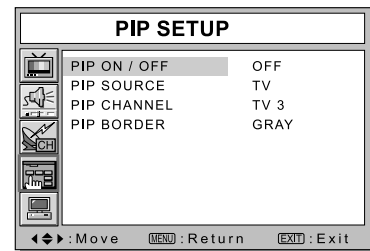


Select **FUNCTION SETUP** using the **TV CH+/-** buttons and then press the **VOL+** button.



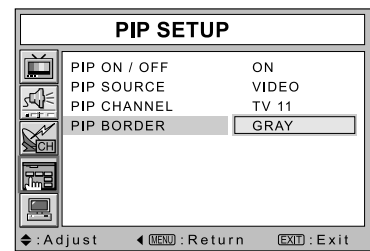
Select **PIP SETUP** using the **TV CH+/-** buttons and then press the **VOL+** button.

- The PIP SETUP menu is displayed.



Select **PIP BORDER** using the **TV CH+/-** buttons and then press the **VOL+** button. Select the **BORDER** color using the **TV CH+/-** buttons.

- The PIP window border color is changed to **GRAY** → **BLACK** → **MAGENTA** → **CYAN** → **OFF**.



Press the **EXIT** button to exit the menu.



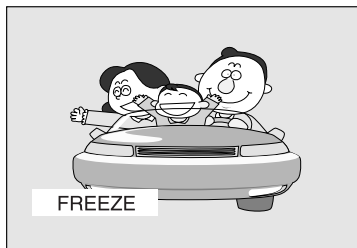
# Freezing the Picture

You can freeze a single frame while you are watching TV.

A circular icon containing a rectangular button with the word "FREEZE" written above it.

Press the FREEZE button.

- The current frame is frozen. Press FREEZE again to resume.

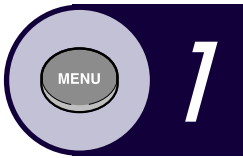


**Note**

- Even if the picture has been frozen, the audio sound continues normally.
- The Freeze function will not work for the PIP window in PIP mode.

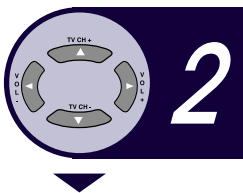
# Setting the Clock

Setting the clock is necessary for using the various timer features of the TV.

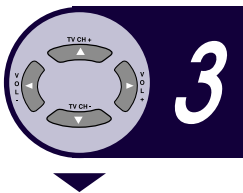
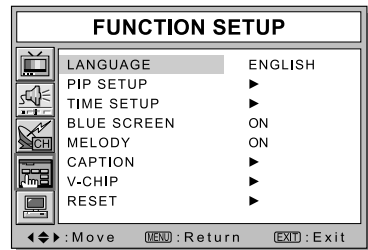


**Press the MENU button.**

- The OSD MENU is displayed.

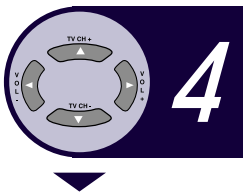
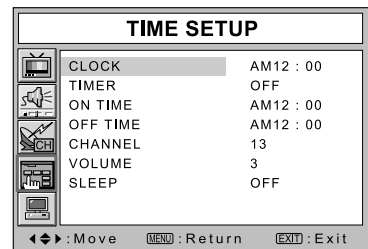


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**

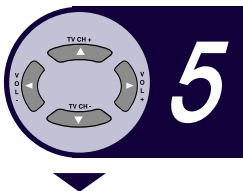
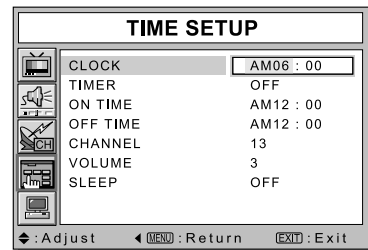


**Select TIME SETUP using the TV CH+/- buttons and then press the VOL+ button.**

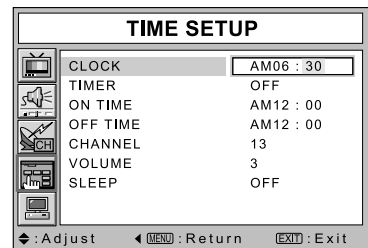
- The TIME SETUP OSD is displayed.



**Move to the Hour using the VOL+ button and then set the Hour to the correct time using the TV CH+/- buttons.**



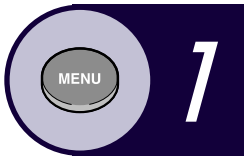
**Move to the Minutes using the VOL+ button and then set the Minutes to the correct time using the TV CH+/- buttons.**



**Press the EXIT button to exit the menu.**

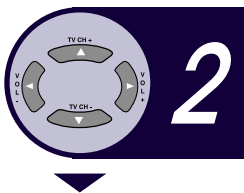
# Setting the On/Off Timer

You can set the On/Off Timer to automatically turn the TV on or off at a desired time. The current time has to be set in order to use the On/Off Timer.

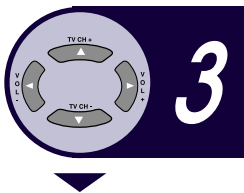
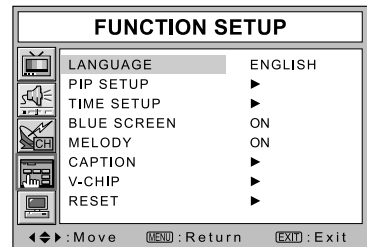


**Press the MENU button.**

- The OSD MENU is displayed.

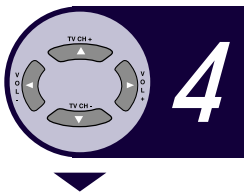
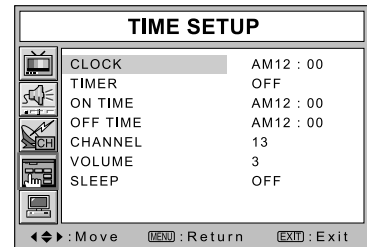


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



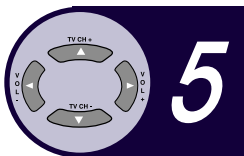
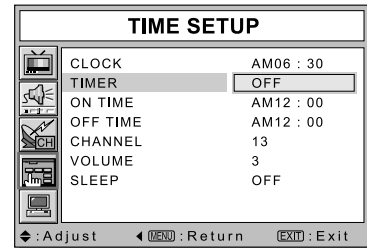
**Move to TIME SETUP using the TV CH+/- buttons and then press the VOL+ button.**

- The TIME SETUP OSD is displayed.

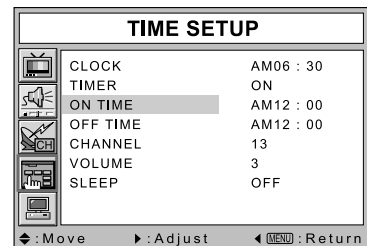


**Move to TIMER using the TV CH+/- buttons and then press the VOL+ button. Select ON using the TV CH+/- buttons.**

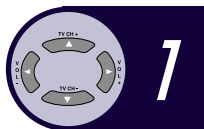
- The ON/OFF TIMER works only when the timer is set to ON.



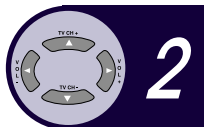
**Press the VOL+ button. Move to ON TIME/ OFF TIME using the TV CH+/- buttons.**



### Turning On At 6:10 AM



**1** Move to the Hours using the VOL+ button and then set the Hour to AM 6 using the TV CH+/- buttons.



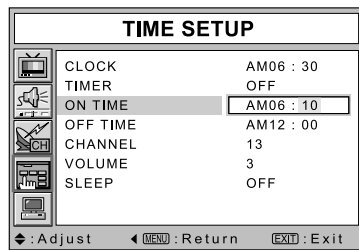
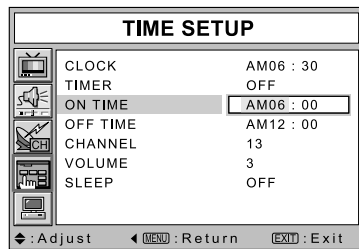
**2** Move to the Minutes using the VOL+ button and then set the Minutes to 10 using the TV CH+/- buttons.



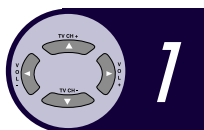
**3** Press the VOL+ button to finish the ON TIME configuration.



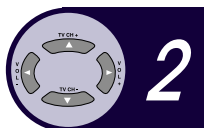
**4** Press the EXIT button to exit the menu.



### Turning Off At 11:55 PM



**1** Move to the Hour using the VOL+ button and then set the Hour to PM 11 using the TV CH+/- buttons.



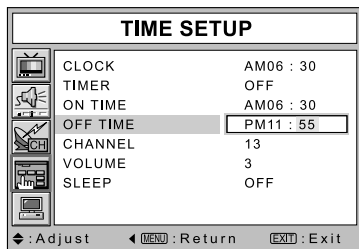
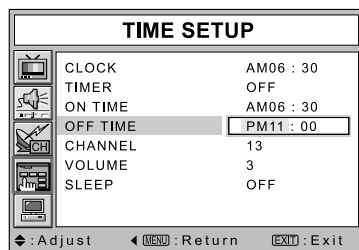
**2** Move to the Minutes using the VOL+ button and then set the Minutes to 55 using the TV CH+/- buttons.



**3** Press the VOL+ button to complete the OFF TIME configuration.

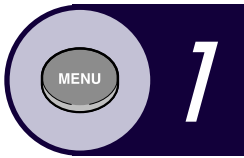


**4** Press the EXIT button to exit the menu.



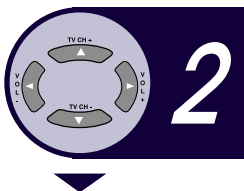
# Selecting the ON Timer Channel / Volume

You can set the channel and volume to play when the TV is turned on by the Timer.

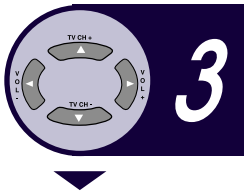
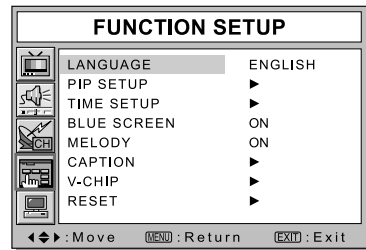


Press the **MENU** button.

- The OSD MENU is displayed.

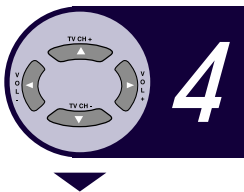
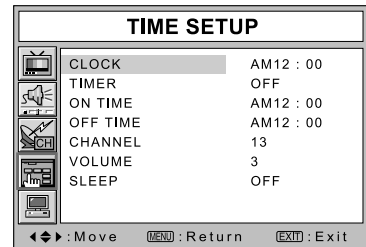


Select **FUNCTION SETUP** using the TV CH+/- buttons and then press the VOL+ button.

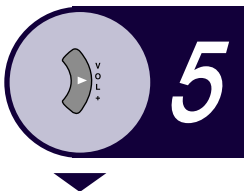
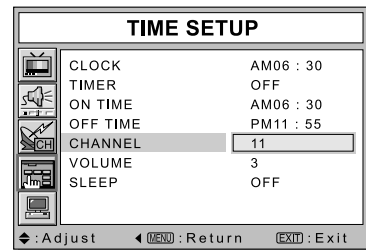


Select **TIME SETUP** using the TV CH+/- buttons and then press the VOL+ button.

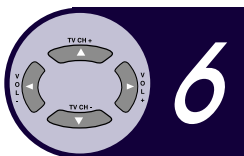
- The TIME SETUP OSD is displayed.



Select **CHANNEL** using the TV CH+/- buttons and then press the VOL+ button. Select the desired channel to watch when the TV is turned on using the TV CH+/- buttons.

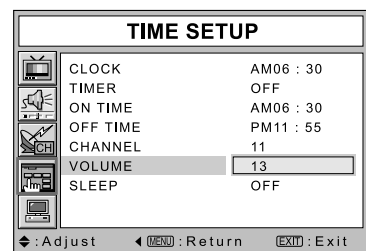


Press the **VOL+** button to finish the configuration.



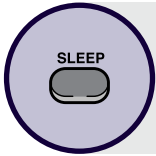
Select **VOLUME** using the TV CH+/- buttons and then press the VOL+ button. Select the volume level for when the TV turns on using the TV CH+/- buttons.

- Press the EXIT button to exit the menu.



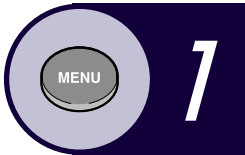
# Setting the Sleep Timer

You can have the TV shut off automatically after a desired period of time.



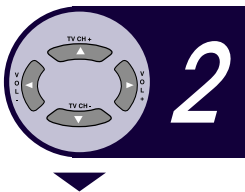
**Shortcut: Press the SLEEP button.**

- The Sleep mode is changed to SLEEP OFF → SLEEP 10 → SLEEP 20 → SLEEP 30 → SLEEP 60 → SLEEP 90 → SLEEP 120 → SLEEP OFF.

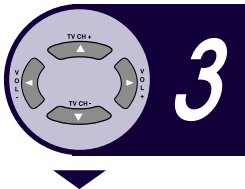
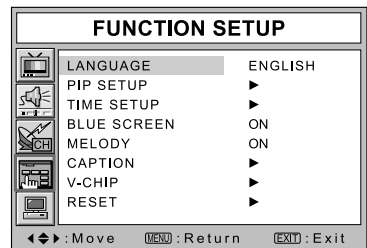


**Press the MENU button.**

- The OSD MENU is displayed.

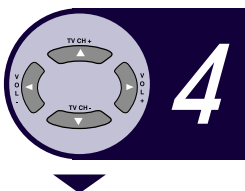
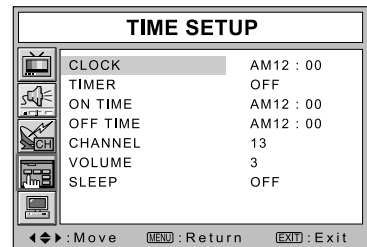


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



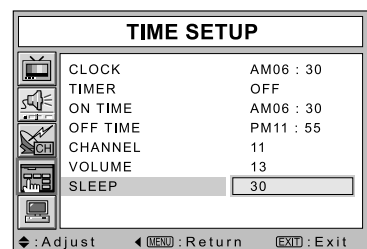
**Select TIME SETUP using the TV CH+/- buttons and then press the VOL+ button.**

- The TIME SETUP OSD is displayed.



**Select SLEEP using the TV CH+/- buttons and then press the VOL+ button. Set the SLEEP time using the TV CH+/- buttons.**

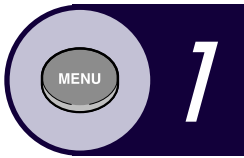
- The SLEEP time is changed to SLEEP OFF → SLEEP 10 → SLEEP 20 → SLEEP 30 → SLEEP 60 → SLEEP 90 → SLEEP 120 → SLEEP OFF.



**Press the EXIT button to exit the menu.**

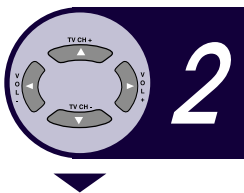
# BLUE SCREEN Function

You can have the TV display a blue screen instead of picture noise when weak video signals are received.

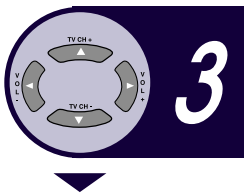
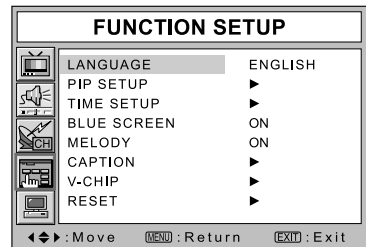


**Press the MENU button.**

- The OSD MENU is displayed.

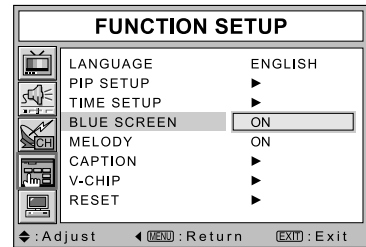


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



**Select BLUE SCREEN using the TV CH+/- buttons and then press the VOL+ button. Select ON using the TV CH+/- buttons.**

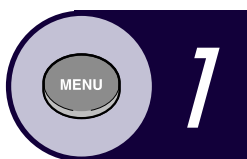
- The Blue Screen function is turned on or off.



**Press the EXIT button to exit the menu.**

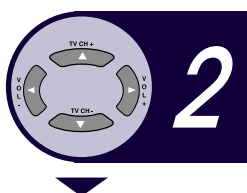
# MELODY Function

If the MELODY function is turned on, a melody plays whenever the TV is turned on or off.

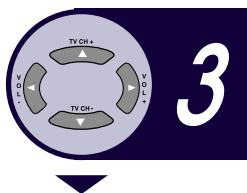
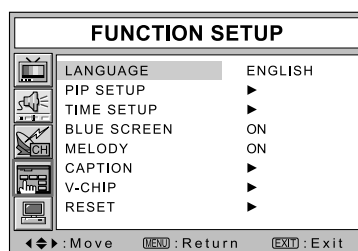


Press the **MENU** button.

- The OSD MENU is displayed.

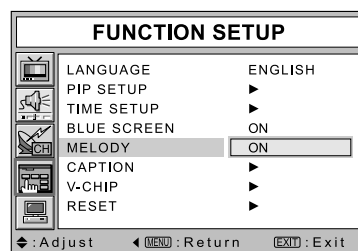


Select **FUNCTION SETUP** using the TV CH+/- buttons and then press the VOL+ button.



Select **MELODY** using the TV CH+/- buttons and then press the VOL+ button. Select **ON** using the TV CH+/- buttons.

- The Melody function is turned on or off.

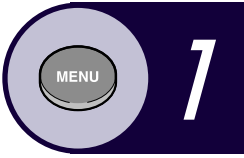


Press the **EXIT** button to exit the menu.



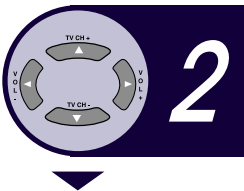
# RESET Function

You can reset all TV settings to their factory defaults.

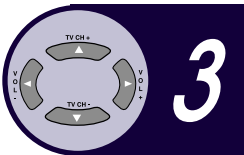
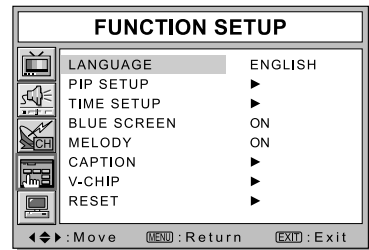


**Press the MENU button.**

- The OSD MENU is displayed.

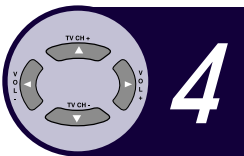
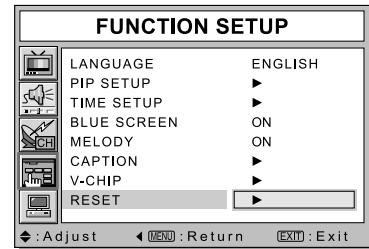


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



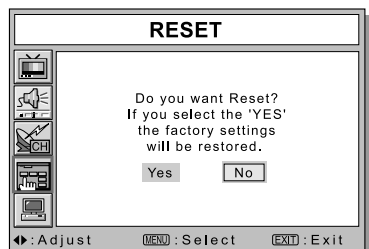
**Select RESET using the TV CH+/- buttons and then press the VOL+ button.**

- All settings are reset to their factory defaults.



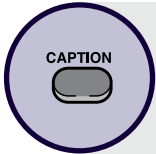
**If you want to Reset, select 'Yes'.**

- When you select 'Yes', all settings are reset to their factory defaults.



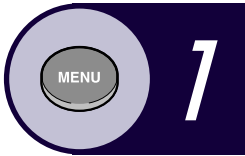
# Viewing Closed Caption Information

Your TV decodes and displays the closed captions that are broadcast along with some television shows. These captions are usually subtitles for the hearing impaired or translations into other languages. All VCRs record the closed caption signal from television programs, so prerecorded video tapes can also deliver closed-caption information. Check for the closed caption symbol ( **CC** ) on the tape's package or your TV program schedule.



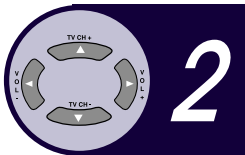
**Shortcut: Press the CAPTION button.**

- Closed Captions are displayed (if available).

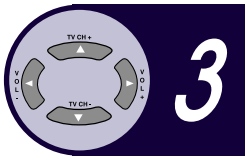
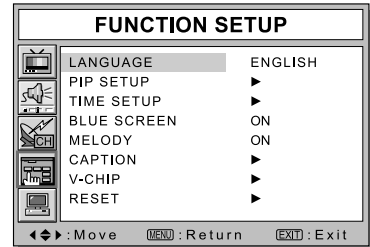


**Press the MENU button.**

- The OSD MENU is displayed.

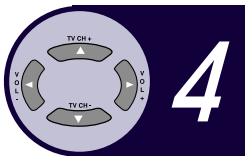


**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**

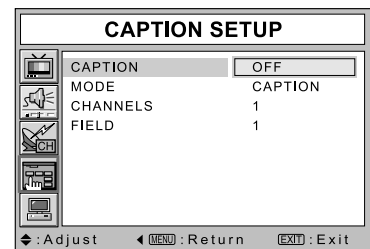


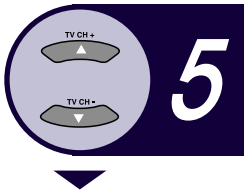
**Select CAPTION using the TV CH+/- buttons and then press the VOL+ button.**

- Caption setup menu is displayed.



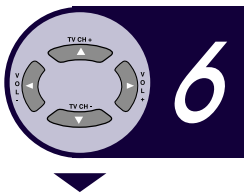
**Select CAPTION using the TV CH+/- buttons and then press the VOL+ button.**



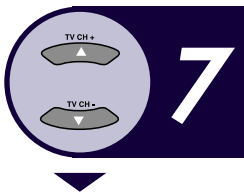


**Select caption ON using the TV CH+/- buttons.**

- Misspellings and unusual characters sometimes occur in closed caption transmissions, especially those of live events. There may be a small delay before captions appear when you change channels. This does not indicate the TV is malfunctioning.

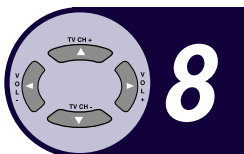


**Select MODE using the TV CH+/- buttons and then press the VOL+ button.**



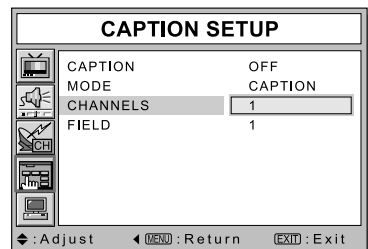
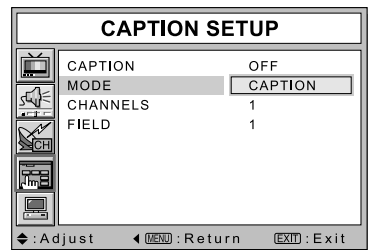
**Select CAPTION or TEXT using the TV CH+/- buttons.**

- In caption mode, captions appear at the bottom of the screen, and they usually cover only a small portion of the picture. In text mode, information unrelated to the program, such as news or weather, is displayed. Text often covers a large portion of the screen.



**If you wish, use the TV CH+/- or VOL+ buttons to change the captioning CHANNELS or FIELD.**

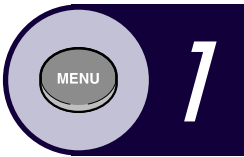
- Different channels and fields display different information. For example, Channel 1 may have subtitles in English, while Channel 2 has subtitles in Spanish.



# Using the V-Chip

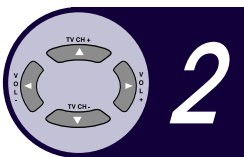
The V-Chip feature automatically blocks programming that is deemed inappropriate for children. The user must first enter a password before any of the V-Chip restrictions can be set up or changed. Note: The V-chip doesn't function when the Picture-in-Picture is active.

## Setting Up Your Password

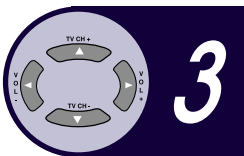
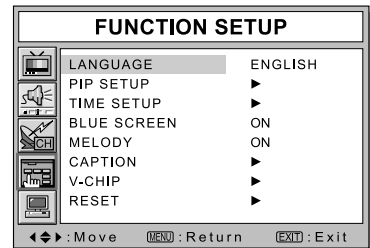


**Press the MENU button.**

- The OSD MENU is displayed.

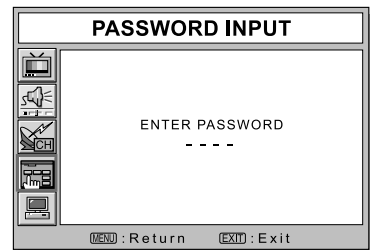


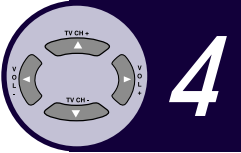
**Select FUNCTION SETUP using the TV CH+/- buttons and then press the VOL+ button.**



**Select V-CHIP using the TV CH+/- buttons and then press the VOL+ button.**

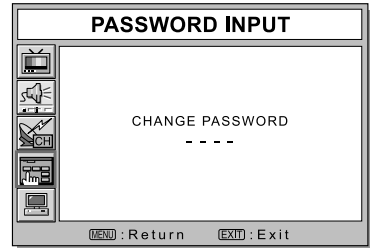
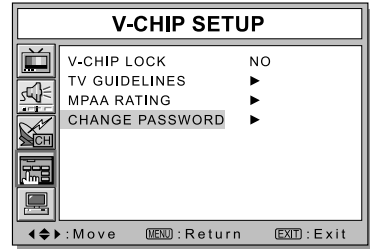
- The "Enter Password" screen will appear. Enter your 4-digit password. The default password for a new TV set is "0-0-0-0." After entering a valid password, the "V-CHIP SETUP" screen will appear.





Select **CHANGE PASSWORD** using the TV CH+/- buttons and then press the VOL+ button.

- The Change Password screen will appear. Choose any 4 digits for your password and enter them. As soon as the 4 digits are entered, the “CONFIRM NEW PASSWORD” screen appears.



*For security you may wish to cut this note from your manual...*

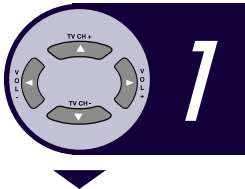


**Note**

- If you forget your password, the universal code is 2-4-8-6.

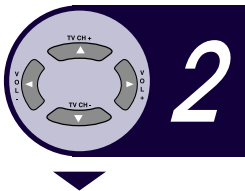
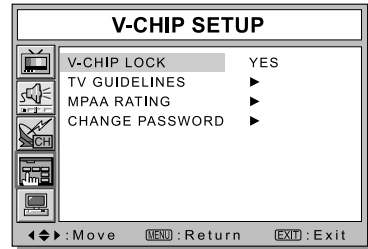
# Using the V-Chip

## How to Enable/Disable the V-Chip

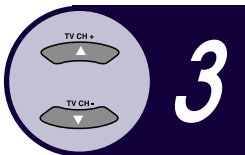
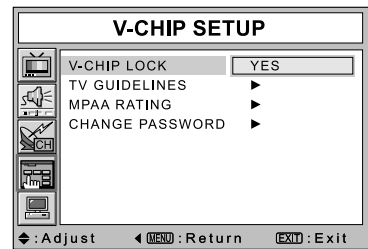


**Select V-CHIP using the TV CH+/- buttons and then press the VOL+ button.**

- The “Enter Password” screen will appear. Enter your 4-digit password. The default password for a new TV set is “0-0-0-0.” After entering a valid password, the “V-CHIP SETUP” screen will appear.



**To enable the V-Chip feature, select V-CHIP LOCK using the TV CH+/- buttons and then press the VOL+ button.**

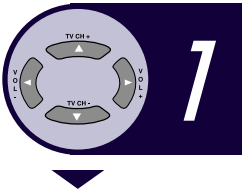


**Select YES using the TV CH+/- buttons.**

## How to Set up Restrictions Using the “TV guidelines”

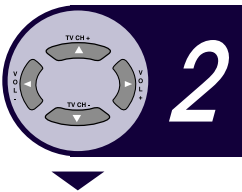
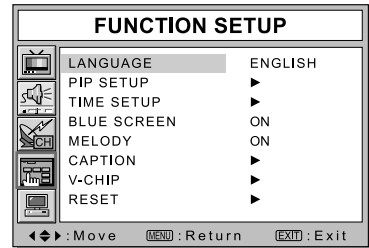
First, set a password and enable the V-Chip (see previous section).

Parental restrictions can be set using either of two methods: TV GUIDELINES or MPAA RATING.



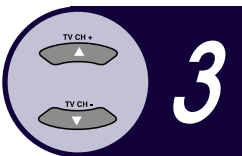
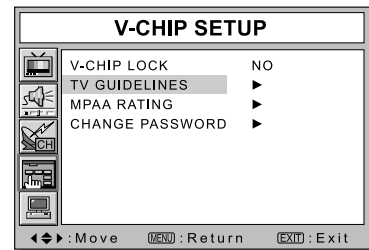
**Select V-CHIP using the TV CH+/- buttons and then press the VOL+ button.**

- The “Enter Password” screen will appear. Enter your 4-digit password. The default password for a new TV set is “0-0-0-0.” After entering a valid password, the “V-CHIP SETUP” screen will appear.



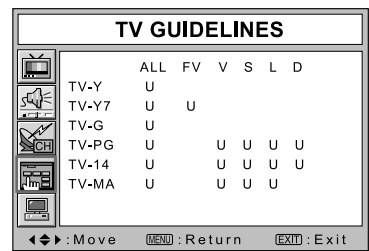
**Select TV GUIDELINES using the TV CH+/- button and then press the VOL+ button.**

- The “TV GUIDELINES” screen will appear.

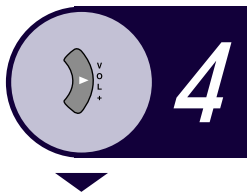


**Press the TV CH+/- buttons to highlight one of the six age-based categories:**

- TV-Y Young children
- TV-Y7 Children 7 and over
- TV-G General audience
- TV-PG Parental guidance
- TV-14 Viewers 14 and over
- TV-MA Mature audience



# Using the V-Chip



**At this point, one of the TV-GUIDELINES is selected.**

**Press the VOL+ button: Depending on your existing setup, a letter “U” or “B” will be selected (U: Unblocked, B: Blocked).**

- Press the TV CH+/- buttons to block or unblock the category. Press the VOL+ button. To select different TV-GUIDELINES, press the TV CH+/- buttons and then repeat the process.



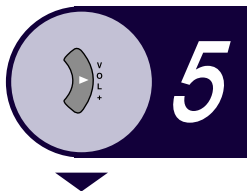
**Note 1**

- TV-Y7, TV-PG, TV-14 and TV-MA have additional options. See the next step to change any of the following sub-ratings: FV: Fantasy violence, V: Violence, S: Sexual situation, L: Language, D: Dialog.



**Note 2**

- The V-Chip will automatically block certain categories that are “more restrictive.” For example, if you block the TV-G category, then TV-PG, TV-14, and TV-MA will be automatically blocked.



**How to set the FV, V, S, L and D sub-ratings: First, select one of these TV-GUIDELINES: TV-Y7, TV-PG, TV-14 or TV-MA (see Step 4). Next, while TV-GUIDELINES is selected, repeatedly press the VOL+ button.**

- This will cycle through the available sub-ratings (FV, V, S, L and D). A letter (“U” or “B”) is displayed for each sub-rating. While the “U” or “B” is selected, press the TV CH+/- buttons to change the sub-rating.



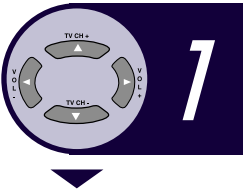
**Note**

- The V-Chip will automatically block certain categories that are “More restrictive”. For example, if you block the “L” sub-rating in TV-PG, then the “L” sub-ratings in TV-14 and TV-MA will automatically be blocked.



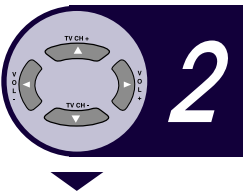
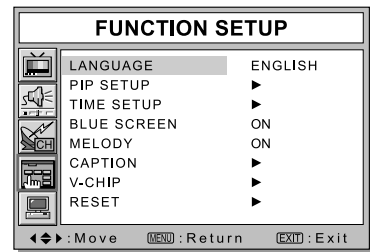
## How to Set up Restrictions Using the MPAA Ratings: G, PG, PG-13, R, NC-17, X

The MPAA rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies. Eventually, movie videocassettes will be encoded with MPAA ratings. When the V-CHIP LOCK is ON, the TV will automatically block any programs that are coded with objectionable ratings (either MPAA or TV-Ratings).



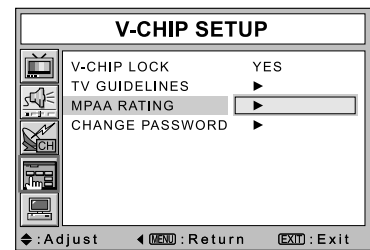
**Select V-CHIP using the TV CH+/- buttons and then press the VOL+ button.**

- The “Enter Password” screen will appear. Enter your 4-digit password. The default password for a new TV set is “0-0-0-0.” After entering a valid password, the “V-CHIP SETUP” screen will appear.

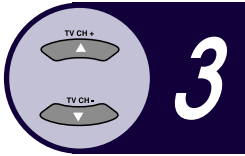


**Select the MPAA RATING using the TV CH+/- buttons and then press the VOL+ button.**

- The “MPAA RATING” screen will appear.



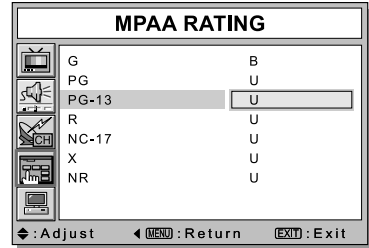
# Using the V-Chip



**Repeatedly press the the TV CH+/- buttons to highlight a particular MPAA category.**

- The MPAA categories are as follows.
  - G General audience (no restrictions).
  - PG Parental guidance suggested.
  - PG-13 PG-13 (Parents strongly cautioned).
  - R R (Restricted. Children under 17 should be accompanied by an adult).
  - NC-17 No children under age 17.
  - X X (Adults only).
  - NR Not rated.

While a particular category is highlighted, press the VOL+ button to activate it. A letter ("U" or "B") will be displayed. Press the TV CH+/- buttons to select "U" or "B".



## Note

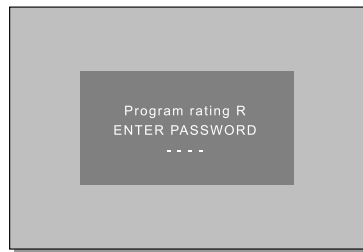
- The V-Chip will automatically block any category that is "more restrictive." For example, if you block the "PG-13" category, then "R", "NC-17", and "X" will automatically be blocked also.

## How to Continue Watching after the V-Chip Blocks a Channel

If the TV is tuned to a restricted channel, the V-CHIP will block it.

The screen will prompt you to “ENTER PASSWORD.”

Enter the correct password to temporarily cancel the V-Chip and resume normal viewing.

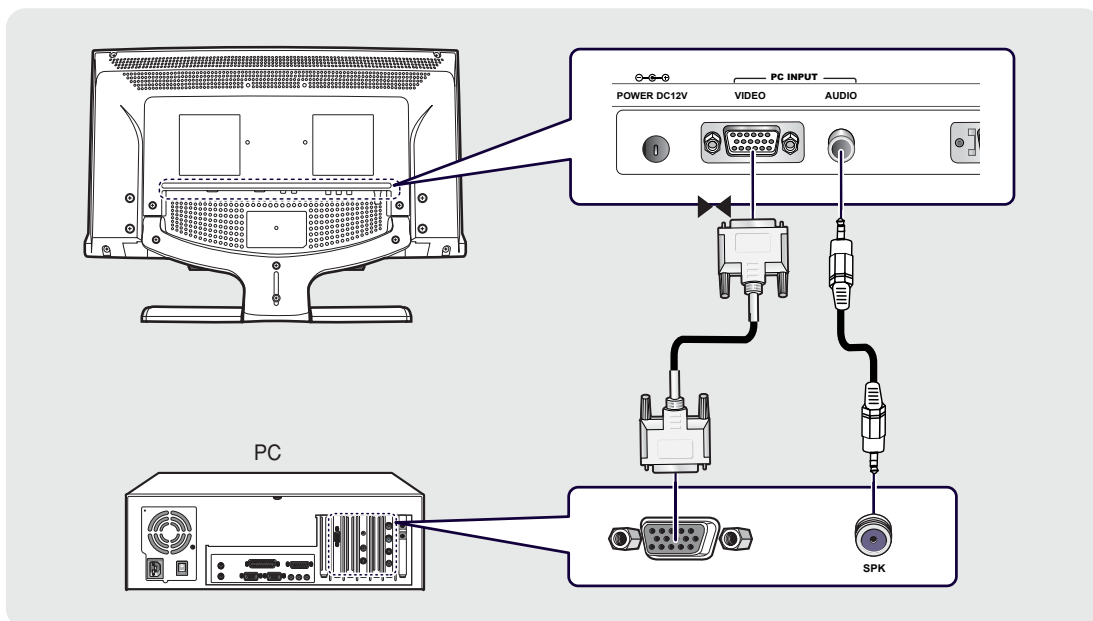


### Note

- If you turn the power off and on, the V-Chip will be enabled again.
- You can also enable the V-Chip again in the setup menu.

# Connecting to a PC

## Connection Procedures



- 1** Connect the PC INPUT-VIDEO jack of the TV and the monitor output jack of the PC using the D-Sub cable.
- 2** Connect the PC INPUT - AUDIO jack of the TV and the audio output jack of the PC with the audio cable.



### To view the PC screen on the TV

- 1** Turn the PC on and check that the PC settings are correct.
  - If the PC settings are incorrect, the screen may display a duplicated or distorted picture.
  - For PC configuration procedures, refer to page 54.
- 2** Press the TV/SOURCE button and select PC INPUT mode.
  - You can also press the PC button on the remote control.
- 3** Adjust the PC screen.  
(For adjustment procedures, refer to page 55~59.)

# Configuring a PC

The following PC screen configuration procedures may differ depending on the model of your PC. This product supports DDC (Display Data Channel) to enable the automatic configuration of the screen.

## PC Configuration Procedures

**1**

1. In WINDOWS 98/ME/2000/XP, select Start → Settings → Control Panel.

**2**

2. Double-click Display to open the Display Properties dialog box.

**3**

3. Click the Settings tab.

**1**

Set the Screen area to 1280 by 768 pixels.

**2**

Set the Colors to 16 bit, 24 bit, or 32 bit.



### Note

- A screen resolution of WXGA (1280 X 768) provides the best screen quality.
- Configure the screen color to 16-bit, or 24-bit.
- The vertical frequency for a TFT LCD TV with a screen resolution of 1280 x 768 is 60Hz.

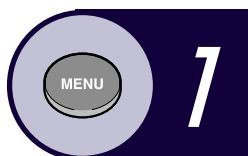
## VESA Standard Modes

Resolution	640 × 480	640 × 480	640 × 480	800 × 600	800 × 600	800 × 600	1024 × 768	1024 × 768
Vertical Frequency	60.0 Hz	72.0 Hz	75.0 Hz	60.0 Hz	72.0 Hz	75.0 Hz	60.0 Hz	70.1 Hz

# Adjusting the PC Picture Quality

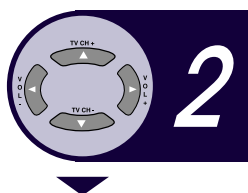
## Adjusting the Frequency

If vertical bars appear on the PC screen, adjust the frequency.

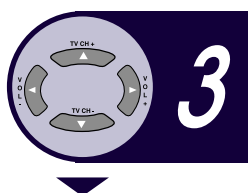


**Press the MENU button.**

- The OSD MENU is displayed.



**Select PC SETUP using the TV CH+/- buttons and then press the VOL+ button.**

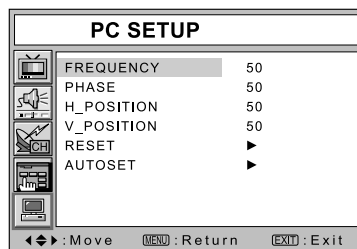


**Select FREQUENCY using the TV CH+/- buttons and adjust the frequency using the VOL+ button.**

- During adjustment, an additional adjustment window is displayed.

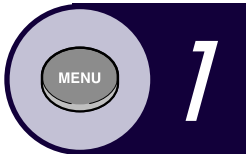


**Press the EXIT button to exit the menu.**



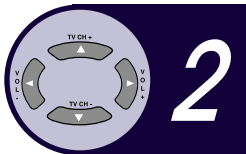
## Adjusting the Phase

If vertical lines and letters are blurred on the PC screen, adjust the phase.

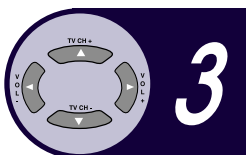
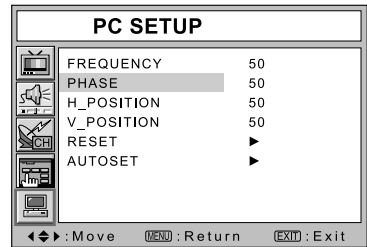


**Press the MENU button.**

- The OSD MENU is displayed.



**Select PC SETUP using the TV CH+/- buttons and then press the VOL+ button.**



**Select PHASE using the TV CH+/- buttons and adjust the phase using the VOL+ button.**

- During adjustment, an additional adjustment window is displayed.

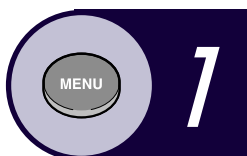


**Press the EXIT button to exit the menu.**

# Adjusting the Picture Position

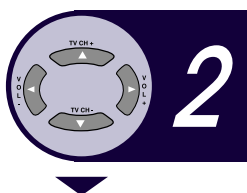
If the picture is not centered on the screen, you can adjust the horizontal and vertical position.

## Adjusting the Horizontal Position

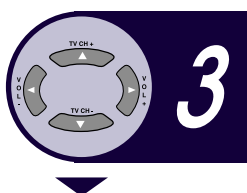
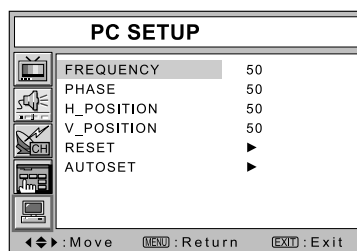


Press the MENU button.

- The OSD MENU is displayed.

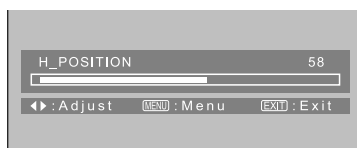
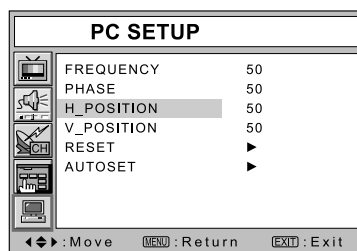


Select PC SETUP using the TV CH+/- buttons and then press the VOL+ button.



Select H\_POSITION using the TV CH+/- buttons and adjust the horizontal position using the VOL+ button.

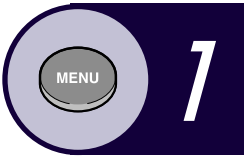
- During adjustment, an additional adjustment window is displayed.



Press the EXIT button to exit the menu.

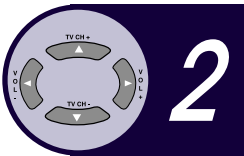


## Adjusting the Vertical Position

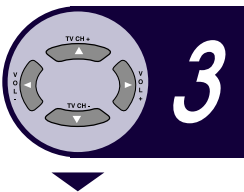
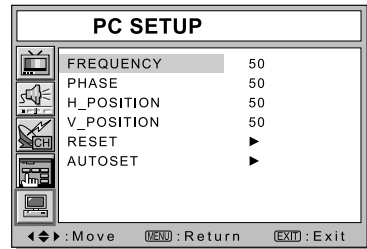


**Press the MENU button.**

- The OSD MENU is displayed.

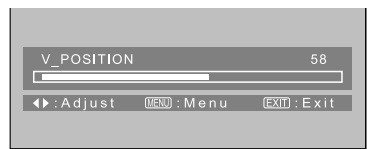
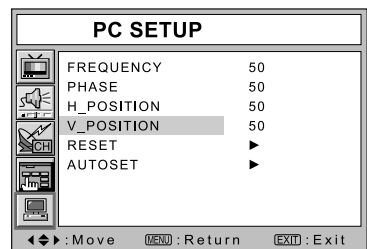


**Select PC SETUP using the TV CH+/- buttons and then press the VOL+ button.**



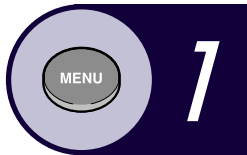
**Select V\_POSITION using the TV CH+/- buttons and adjust the vertical position using the VOL+ button.**

- During adjustment, an additional adjustment window is displayed.



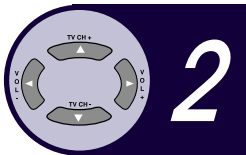
**Press the EXIT button to exit the menu.**

# PC RESET Function

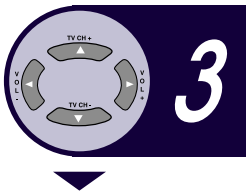


Press the **MENU** button.

- The OSD MENU is displayed.



Select **PC SETUP** using the **TV CH+/-** buttons and then press the **VOL+** button.

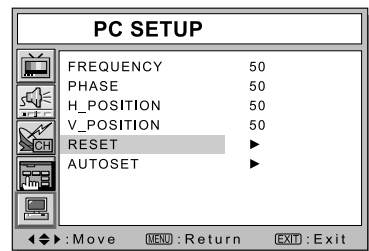
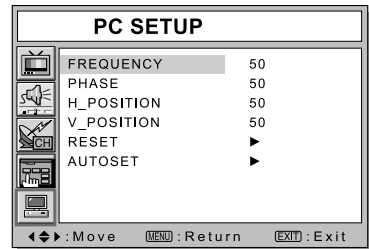


Select **RESET** using the **TV CH+/-** buttons and then select using the **VOL+** button.

- This returns you to the factory default settings.

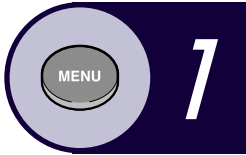


Press the **EXIT** button to exit the menu.



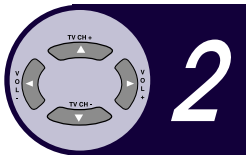
# Auto Set

You can have the TV adjust the frequency and phase of the PC screen automatically.

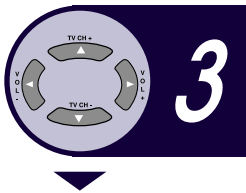
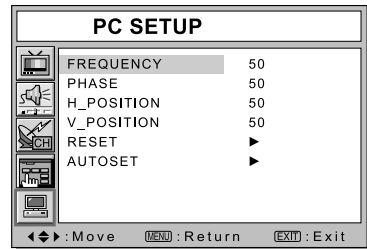


Press the **MENU** button.

- The OSD MENU is displayed.

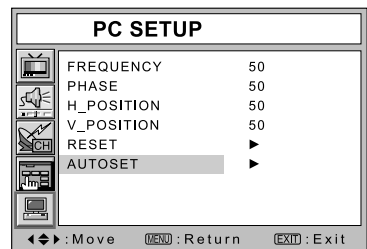


Select **PC SETUP** using the **TV CH+/-** buttons and then press the **VOL+** button.



Select **AUTOSET** using the **TV CH+/-** buttons and then select using the **VOL+** button.

- The PC screen is adjusted automatically.



Press the **EXIT** button to exit the menu.

# Troubleshooting

If your TV seems to have a problem, please refer to the following troubleshooting guide before contacting a service center. If none of these tips apply, do not attempt to repair the product yourself. Call your nearest service center.

## ■ Symptoms that may appear to be a problem

The following symptoms may occur even if the TV is functioning normally.

Symptom	Possible Problem	Possible Solution
No picture. Power LED does not turn on.	Power connection problem.	Check power cable connection. Turn power switch on again.
TV is turned on, but no picture.	Brightness is set too low. Fluorescent tube is expired.	Adjust brightness and contrast. The fluorescent tube has a lifetime of ~50,000 hours. To replace, contact a service center.
An afterimage is generated when continuously watching a still image.	This is an inherent property of LCD panels. Depending on the number of valid pixels, there may be black or bright pixels. These will be less than 0.005% of the sum of all pixels. This is not a problem.	
No picture and no audio.	Wrong line input source selected.	Press LINE to select the correct source.
Picture but no audio.	Volume is set to 0. Mute is active. Audio cable is disconnected.	Turn up the Volume. Press Mute button again. Check audio cable connection.
Remote control malfunctions.	Polarity of the batteries is wrong. Batteries are dead.	Reinstall the batteries properly. Replace the batteries with new ones.
Noise is heard on nearby radio.	This may happen when you use a radio near the TV.	Noise may occur when you use a radio near the TV. Keep some distance between any radios and the LCD TV.
No color.	Color density is adjusted to 0 or almost 0.	Adjust Color density to 100 or less.
Duplicated pictures on screen.	May be caused by reflected broadcasting signals from mountains, buildings, or trees near your house.	Adjust the position and/or direction of the antenna accordingly.
Blurred or snowy picture.	Direction of the antenna is not optimal. The antenna cable is disconnected.	Check that the direction of the antenna is correct. Check that the antenna cable is connected to the ANTENNA jack on the back of the LCD TV.

First try the following list of possible problems and solutions.

If the symptom continues, turn the TV off, and call your nearest service center.

Symptom	Possible Problem	Possible Solution
"No input signal" message appears.	Input signal connection is incorrect.	Make sure the computer is turned on. Check the display cable connections. Check the input signal specifications.
	Input signal is not supported by the LCD TV.	Check the input signal specifications. Check the display cable specifications.
Vertical bars appear.	Inappropriate frequency.	Perform an automatic adjustment or adjust the frequency manually.
Vertical lines and letters are blurred.	Inappropriate phase.	Perform an automatic adjustment or adjust the phase manually.
Entire screen flickers.		This product has been optimally set at the factory to watch TV channels. There may be flickering when you watch still images from a PC. This is not a malfunction of the product.

### Warning

- If a problem has been detected, unplug the power cable from the wall outlet first. Using the product when it has a fault may cause electric shocks or fire. Do not place objects near the wall outlet so that you can unplug the power cable if necessary.

# Specifications

The exterior design and the product specifications are subject to change without prior notice due to improvements in performance.

This product is manufactured for domestic use. It may not be used in countries that have different television system types or power voltages.

<b>Model</b>		TW1730		
<b>LCD Panel</b>	Screen Size	17" WIDE		
	Viewable Screen Size	14.6" x 8.75" (370.56 X 222.336mm)		
	Pixel Area	0.2895 X 0.2895mm		
	Type	TFT LCD		
	Viewing Angle	Up/Down: 176 degrees , Left/Right: 176 degrees		
<b>Receiver / Channels</b>		VHF: Channel 1 ~ Channel 12		
		UHF: Channel 13 ~ Channel 62		
		CATV: Channel 13ch ~ Channel 138ch		
		Television Broadcasting System: NTSC		
<b>Antenna Interface</b>		VHF, UHF: 75Ω		
<b>TV/VIDEO</b>	Video Signal	NTSC-M		
	Video Type	CVBS, S-VHS	DVD (Y, Pb, Pr)	Component
<b>PC</b>	Synchronization	Horizontal Frequency	30 ~ 60KHz	
		Vertical Frequency	56 ~ 75Hz	
	Color Quality	16,772,216 colors		
	Maximum Resolution	1280 X 768		
	Separation Signal	TTL, Anode or Cathode		
Audio Out		5W x 2 / 5W x 2 (2 Way)		
Power Supply		AC 120V, 50/60Hz, DC12V/5A		
Power Consumption		Maximum 60W		
Power Consumption When Power Saving Mode		Less than 3W		
<b>Dimension</b>	Monitor + Stand	520mm(W) X 377mm(H) X 151mm(D)		
	Monitor Alone	520mm(W) X 293mm(H) X 58mm(D)		
Weight		17.4 lbs. (7.9 Kg)		
Accessories		Remote control, Battery (AAA), User's Guide, Power Cord, AC adapter, RF Cable, Audio/Video Cable.		

\* This device has been registered in regards to EMI for residential use. It may be used in all areas.

# Appendix

## Standard Signal Mode Table

A TFT LCD TV is configured to support the following 10 signal modes. A user can register up to 10 modes. Configure the PC display mode referring to the following table. For configuration procedures, refer to the Appendix of your PC manual.

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Clock Frequency (MHz)	Polarity (H/V)
MAC, 640 X 480	31.469	59.94	25.175	-/-
VESA, 640 X 480	37.861	72.809	31.5	-/-
VESA, 640 X 480	37.5	75	31.5	-/-
IBM, 720 X 400	31.469	70.087	28.322	-/+
VESA, 800 X 600	37.879	60.317	40	+/+
VESA, 800 X 600	48.077	72.188	50	+/+
VESA, 800 X 600	46.875	75	49.5	+/+
MAC, 832 X 624	49.726	74.551	57.284	-/-
VESA, 1024 X 768	48.363	60.004	65	-/-
VESA, 1024 X 768	56.476	70.069	75	-/-

## PIP Screen Configuration Table

MAIN	SUB	TV	VIDEO	S-VID.	DTV				PC
					480i	480p	1080i	720p	
TV		X	X	X	O	O	O	O	X
VIDEO		X	X	X	O	O	O	O	X
S-VIDEO		X	X	X	O	O	O	O	X
D T V	480i	X	X	X	X	X	X	X	X
	480p	O	O	O	X	X	X	X	X
	1080i	O	O	O	X	X	X	X	X
	720p	O	O	O	X	X	X	X	X
PC		O	O	O	X	X	X	X	X

# Limited Warranty

## Who Provides the Limited Warranty

During the warranty period, the GoVideo Warranty Administrator will honor LCD TV service for 90 days labor, 1 year parts from the original date of consumer purchase. See below for Commercial, Industrial or Educational use coverage. The LCD TV remote control is warranted for 90 days from the date of purchase.

90 days labor  
&  
1 year parts

## Who is Protected

This warranty protects the original consumer owner of this GoVideo product.

## What is Covered and How Long

This warranty covers internal operating parts and service/labor to repair or replace covered parts in this GoVideo product for 90 days labor, 1 year parts, from the date of purchase, defined as follows: (1) Original Consumer Retail Purchase; (2) First Rental Purchase Agreement; or (3) First Lease Purchase Agreement (the "Warranty Period"). Labor and replacement parts supplied during the Warranty Period are covered only for the remaining portion of the original Warranty Period. The GoVideo Warranty Administrator shall have no liability for service under this warranty if non-OEM (Original Equipment Manufacturer) replacement parts are used in the repair of your GoVideo product.

## What the Owner Must Do If Service is Required

If service under this warranty is required, log onto "www.govideo.com" to determine the nearest authorized GoVideo service center.

## Other Warranty Coverage

Commercial, Industrial or Educational use has the same warranty coverage as stated in this warranty.

## What are the Exceptions

This warranty does not cover: (1) Normal maintenance service, such as video head cleaning. (2) Damage from misuse, abuse, neglect or accident, natural disasters or Acts of God. (3) Cabinetry, decorative parts, A/C adapters, knobs or buttons. (4) The foreign country use of this product. (5) GoVideo product which has been electronically or mechanically modified in any way or incorporated into other products. (6) Installation and setup service adjustments. (7) Owner instruction. Your Owner's Guide provides information regarding operating instructions and user controls. For additional information, contact your authorized GoVideo dealer.

Go Video is not responsible for any shipping, handling or insurance charges.

This Exclusive Limited Warranty excludes all incidental and consequential damages. Some states do not allow the exclusion of incidental and consequential damages, so the above exclusion may not apply to you.

ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY PERIOD. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This Exclusive Limited Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

## GoVideo WARRANTY ADMINISTRATOR

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